0163131en	005
0609	

Generator

GP 2600
GP 3800A
GP 4000
GP 5600A / GPS 5600A
GP 6600A / GPS 6600A

REPAIR MANUAL

0163131EN

This manual covers machines with Item Number:

0620088, 0620089, 0620090, 0620091, 0620092, 0620093, 0620094, 0620095, 0620096, 0620097, 0620098, 0620099, 0620100, 0620101, 0620102, 0620103, 0620104, 0620116, 0620326, 0620327, 0620328, 0620329, 0620330, 0620331, 0620342, 0620379, 0620380, 0620381, 0620382, 0620383, 0620384, 0620385, 0620386, 0620484, 0620485

Operating / Parts Information

You must be familiar with the operation of this machine before you attempt to troubleshoot or repair it. Basic operating and maintenance procedures are described in the Operator's Manual supplied with the machine. Keep a copy of the Operator's Manual with the machine at all times. Use the separate Parts Book supplied with the machine to order replacement parts. If you are missing either of the documents, please contact Wacker Neuson Corporation to order a replacement.

Damage caused by misuse or neglect of the unit should be brought to the attention of the operator to prevent similar occurrences from happening in the future.

This manual provides information and procedures to safely repair and maintain the above Wacker Neuson model(s). For your own safety and protection from injury, carefully read, understand, and observe all instructions described in this manual. THE INFORMATION CONTAINED IN THIS MANUAL IS BASED ON MACHINES MANUFACTURED UP TO THE TIME OF PUBLICATION. WACKER NEUSON CORPORATION RESERVES THE RIGHT TO CHANGE ANY PORTION OF THIS INFORMATION WITHOUT NOTICE.

CALIFORNIA

Proposition 65 Warning:

WARNING

Engine exhaust, some of its constituents, and certain vehicle components, contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Laws Pertaining to Spark Arresters

Notice: State Health Safety Codes and Public Resources Codes specify that in certain locations spark arresters be used on internal combustion engines that use hydrocarbon fuels. A spark arrester is a device designed to prevent accidental discharge of sparks or flames from the engine exhaust. Spark arresters are qualified and rated by the United States Forest Service for this purpose.

In order to comply with local laws regarding spark arresters, consult the engine distributor or the local Health and Safety Administrator.

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1 Safety Information

This manual contains DANGER, WARNING, CAUTION, *NOTICE,* and NOTE callouts which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE*:** Used without the safety alert symbol, ***NOTICE indicates a situation which, if not avoided, could result in property damage.

Note: *Contains additional information important to a procedure.*

1.1 Operating Safety

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell. NEVER use this generator inside a home or garage, EVEN IF doors and windows are open. Only use this generator OUTSIDE and far away from windows, doors, and vents.

BACKFEED FROM THE GENERATOR INTO THE PUBLIC POWER DISTRIBUTION SYSTEM CAN CAUSE SERIOUS INJURY OR DEATH TO UTILITY WORKERS!

Improper connection of generator to a building's electrical system can allow electrical current from the generator to backfeed into utility lines. This may result in electrocution of utility workers, fire, or explosion. Connections to a building's electrical system must be made by a qualified electrician and comply with all applicable laws and electrical codes.

If connected to a building's electrical system the generator must meet the power, voltage, and frequency requirements of the equipment in the building. Differences in power, voltage, and frequency requirements may exist and improper connection may lead to equipment damage, fire, and personal injury or death.

Familiarity and proper training are required for the safe operation of the machine. Machines operated improperly or by untrained personnel can be hazardous. Read the operating instructions contained in this manual and the engine manual, and familiarize yourself with the location and proper use of all controls. Inexperienced operators should receive instruction from someone familiar with the machine before being allowed to operate it.

1.1.1 NEVER operate the generator when open containers of fuel, paint, or other flammable liquids are near.

1.1.2 NEVER operate the generator, or tools attached to the generator, with wet hands.

1.1.3 NEVER use worn electrical cords. Severe electrical shock and equipment damage may result.

1.1.4 NEVER run the electrical cords under the generator, or over vibrating or hot parts.

1.1.5 NEVER enclose or cover the generator when it is in use or when it is hot.

1.1.6 NEVER overload the generator. The total amperage of the tools and equipment attached to the generator must not exceed the load rating of the generator.

1.1.7 NEVER operate the machine in snow, rain, or standing water.

1.1.8 NEVER allow untrained personnel to operate or service the generator. The generator set should be set up by a certified electrician.

1.1.9 NEVER stand on the machine.

1.1.10 DO NOT stand under the machine while it is being hoisted or moved.

1.1.11 DO NOT attach equipment to the machine when it is suspended.

1.1.12 Store the machine properly when it is not being used. The machine should be stored in a clean, dry location out of the reach of children.

1.1.13 ALWAYS position and operate the generator on a firm, noncombustible, level surface.

1.1.14 ALWAYS transport the generator in an upright position.

1.1.15 ALWAYS keep the machine at least one meter (three feet) away from structures, buildings, and other equipment during use.

1.1.16 ALWAYS keep the area immediately surrounding and underneath the machine clean, neat, and free of debris and combustible materials. Make sure that the area overhead is clear of debris that could fall onto or into the machine or exhaust compartment.

1.1.17 ALWAYS remove all tools, cords, and other loose items from the generator before starting it.

1.1.18 ALWAYS make certain the machine is well-grounded and securely fastened to a good earthen ground per national and local regulations.

1.2 Operator Safety while using Internal Combustion Engines

WARNING

Internal combustion engines present special hazards during operation and fueling. Read and follow the warning instructions in the engine owner's manual and the safety guidelines below. Failure to follow the warnings and safety standards could result in severe injury or death.

1.2.1 NEVER use this generator inside a home or garage, EVEN IF doors and windows are open. Only use OUTSIDE and far away from windows, doors, and vents. Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

1.2.2 NEVER use a generator inside an enclosed area such as a tunnel or a trench.

1.2.3 Do not smoke while operating the machine.

1.2.4 Do not smoke when refueling the engine.

1.2.5 Do not refuel a hot or running engine.

1.2.6 Do not refuel the engine near an open flame.

1.2.7 Do not spill fuel when refueling the engine.

1.2.8 Do not run the engine near open flames.

1.2.9 Do not start the engine if fuel has spilled or a fuel odor is present. Move the generator away from the spill and wipe the generator dry before starting.

1.2.10 Refill the fuel tank in a well-ventilated area.

1.2.11 Replace the fuel tank cap after refueling.

1.2.12 ALWAYS check the fuel lines and the fuel tank for leaks and cracks before starting the engine. Do not run the machine if fuel leaks are present or the fuel lines are loose.

1.3 Service Safety

Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary. If the generator is experiencing problems or is being serviced, attach a "DO NOT START" sign to the control panel to notify other people of its condition.

1.3.1 Do not use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.

1.3.2 DO NOT attempt to clean or service the machine while it is running.

1.3.3 Do not modify the machine without the express written approval of the manufacturer.

1.3.4 DO NOT allow water to accumulate around the base of the machine. If water is present, move the machine and allow the machine to dry before servicing.

1.3.5 DO NOT service the machine if your clothing or skin is wet.

1.3.6 DO NOT allow untrained personnel to service this equipment. Only trained electrical technicians should be allowed to service the electrical components of this equipment.

1.3.7 Keep the machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.

1.3.8 ALWAYS replace the safety devices and guards after repairs and maintenance.

1.3.9 ALWAYS let the engine cool before transporting or servicing the machine.

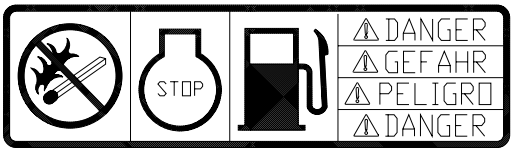
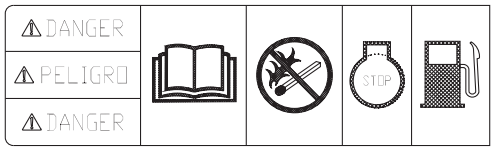
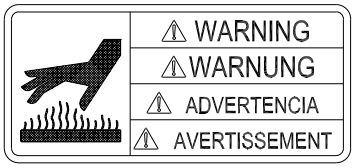
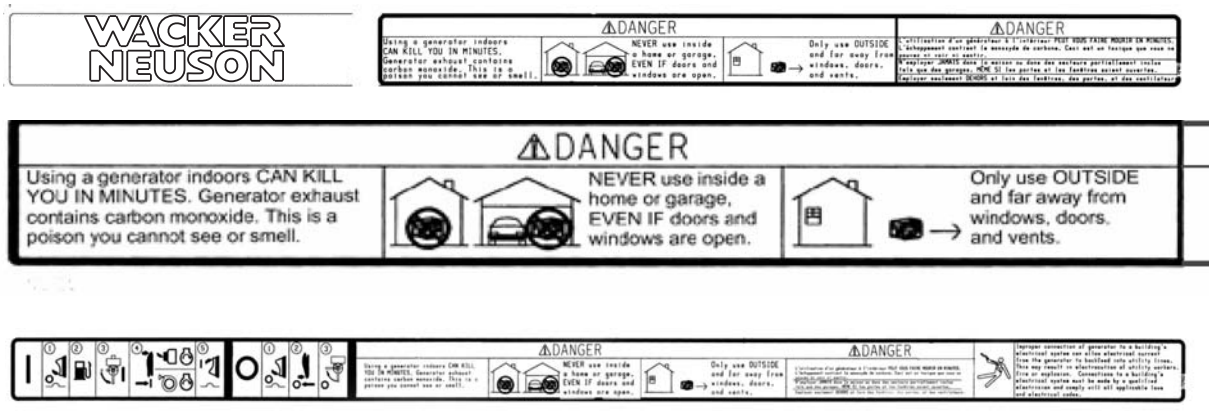
1.3.10 ALWAYS keep hands, feet, and loose clothing away from the moving parts on the generator and engine.

1.3.11 ALWAYS turn the engine off before servicing the machine. If the engine has electric start, disconnect the negative terminal on the battery before servicing the machine.

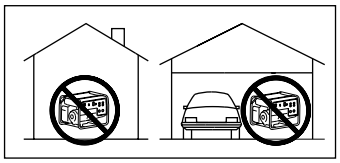
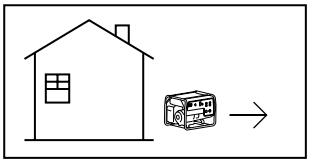
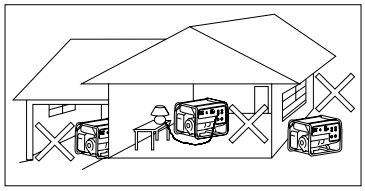
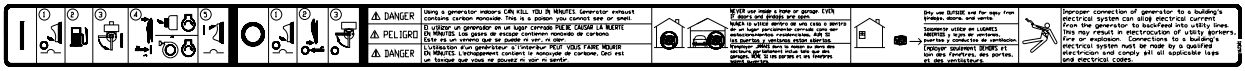
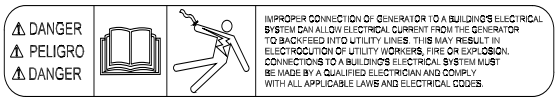
1.3.12 ALWAYS keep the fuel lines in good condition and properly connected. Leaking fuel and fumes are extremely explosive.

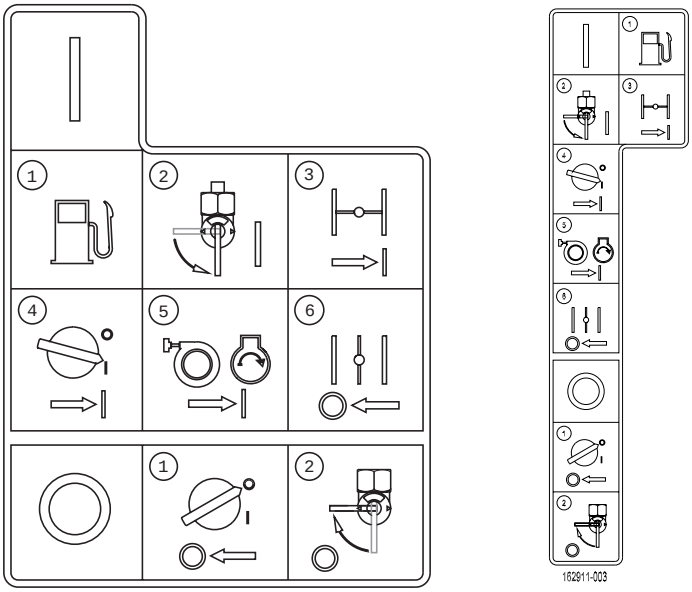
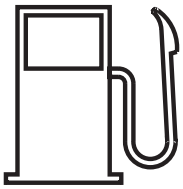
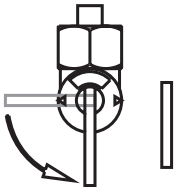
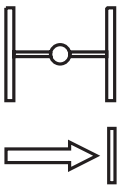
1.4 Safety and Operating Labels

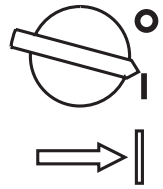
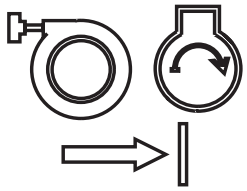
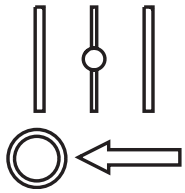
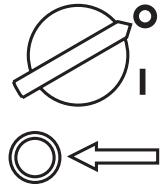
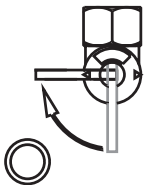
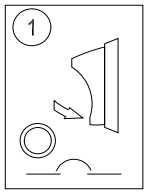
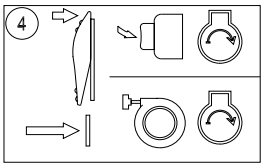
Wacker Neuson machines use international pictorial labels where needed. These labels are described below:

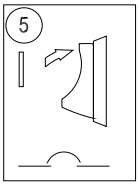
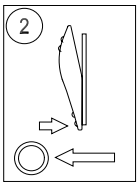
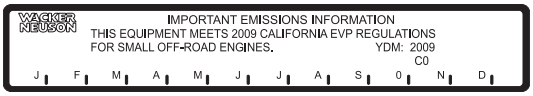
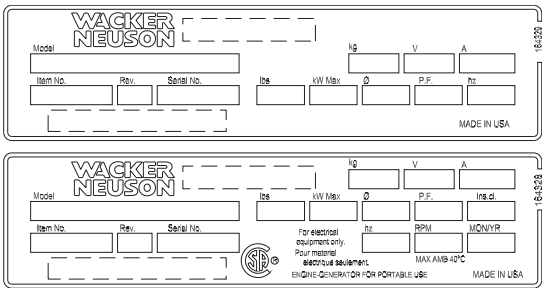
Label	Meaning
	DANGER! No sparks, flames or burning objects near machine. Shut off the engine before refueling.
	DANGER! No sparks, flames or burning objects near machine. Shut off the engine before refueling. Read the Operator's Manual for machine information.
	WARNING! Hot surface!
	

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

Label	Meaning
	NEVER use inside a home or garage, EVEN IF doors and windows are open.
	Only use OUTSIDE and far away from windows, doors, and vents.
	Use in a well-ventilated area. Do not use indoors or near open windows. Fumes can cause death.
	
	WARNING! To reduce the risk of electrical shock and arc flash, read the Operator's Manual. Improper connection of the generator to a building's electrical system can allow electrical current from the generator to backfeed into utility lines. This may result in electrocution of utility workers, fire, or explosion. Connections to a building's electrical system must be made by a qualified electrician and comply with all applicable laws and electrical codes.
	DANGER! Asphyxiation hazard. Read the Operator's Manual for instructions.

Label	Meaning
	Electrical ground
	
	CAUTION! Use only clean, filtered gasoline fuel. Check the fuel level.
	Open the fuel flow valve.
	Close the choke.

Label	Meaning
	Turn the engine switch to the ON position.
	Pull the rewind starter.
	Open the choke.
	Turn the engine switch to “OFF”.
	Close the fuel flow valve.
	Press circuit breaker switch to OFF position.
	Press engine switch to ON position. GPS - Press ignition switch. GP - Pull the rewind starter.

Label	Meaning
	Press circuit breaker switch to ON position.
	Press engine switch to OFF position.
	This equipment **does not** meet California EVP emission regulations for small off-road engines.
	Important Emissions Information This equipment meets California EVP emission regulations for small off-road engines.
	WARNING Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
	A nameplate listing the model number, item number, revision number, and serial number is attached to each unit. Please record the information found on this plate so it will be available should the nameplate become lost or damaged. When ordering parts or requesting service information, you will always be asked to specify the model number, item number, revision number, and serial number of the unit.

Label	Meaning
U.S. PAT. Nos.: OTHER U.S. AND FOREIGN PATENTS PENDING	This machine may be covered by one or more patents.

Notes

2 Operation

2.1 Information Regarding Operation

The information regarding the operation of the machine included in this manual is condensed. Refer to the Operator's Manual for complete operating instructions. Always read, understand, and follow the procedures in the Operator's Manual when operating the machine.

2.2 Determining Power Requirements

This generator is designed to operate single-phase, 60 Hz appliances running at 120 VAC or 240 VAC. Check the nameplate or label provided on tools and appliances to make sure their power requirements match the power output of the generator.

Some appliances and tools require a surge of current when starting. This means that the amount of power needed to initially start the equipment is larger than the power required to keep it running. The generator must be capable of supplying this "surge" current. Other types of appliances require more power than is actually stated on their nameplate.

The information in "Approximate Starting Power Requirements" is offered only as a general guideline to help you in determining power requirements for different types of equipment. Check with your nearest Wacker Neuson dealer, or contact the manufacturer or dealer of the tool or appliance, with questions regarding its power requirements.

***NOTICE*:** If a tool or appliance does not reach full speed within a few seconds when switched on, turn it off immediately to avoid damage.

Approximate Starting Power Requirements:

Approximate Starting Power Requirements

- Incandescent lights and appliances such as irons and hot plates, which use a resistive-type heating element, require the same wattage to start and run as is stated on their nameplates.
- Fluorescent and mercury lamps require 1.2–2 times their stated wattage to start.
- Electrical motors and many types of electrical tools often require a large starting current. The amount of starting current depends on the type of motor and its use.
- Most electrical tools require 1.2–3 times their stated wattage for starting.

- Loads such as submersible pumps and air compressors require a very large force to start. They need as much as 3–5 times the wattage stated on the nameplate in order to start.

  If the wattage is not given for a particular tool or appliance, it can be calculated by multiplying its voltage and amperage requirements:

  Single Phase: VOLTS x AMPS = WATTS

  Three Phase: VOLTS x AMPS x 1.732 x 0.8 = WATTS

2.3 Recommended Battery (GPS only)

This generator is shipped without a battery. The recommended battery to be used is:

Battery Type	50-N18L-A
Voltage	12 V
Capacity	20 A/h
L x W x H	206 x 90 x 164 mm (8-1/8 x 3-9/16 x 6-7/16 in.)

2.4 Installation

Place the generator in an area where it will not be exposed to rain, snow, or direct sunlight. Make sure it is positioned on firm, level ground, so it will not slide or shift. Position the engine exhaust away from areas where people may be present.

The surrounding area must be free from water and moisture. All components must be protected from excessive moisture.

DANGER

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell. NEVER use this generator inside a home or garage, EVEN IF doors and windows are open. Only use this generator OUTSIDE and far away from windows, doors, and vents.

DANGER

NEVER install a generator in an enclosed area such as a tunnel or a trench. Using a generator in a tunnel or a trench CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell. NEVER use this generator inside a tunnel or a trench.

2.5 Generator Derating

All generators are subject to derating for altitude and temperature. Internal combustion engines, unless modified, run less efficiently at higher altitudes due to the reduction of air pressure. This translates into a lack of power and thus reduction in generator output. Temperature affects both engine and generator performance. As temperature increases, an engine will run less efficiently and more resistance will be found in electrical components. Therefore, as the temperature increases, the output of the generator decreases. Altitude also affects the cooling capacity of air—the higher the altitude the less dense the air is and thus the lower its ability to transfer heat.

For every increase in altitude of 500 m (1650 ft.) above 1000 m (3300 ft.), the output of the generator will be reduced by 3%. For every increase of 5° C (9° F) in ambient temperature above 40° C (104° F), the output of the generator will be reduced by 3%. Use the tables shown for altitude and temperature deration factors. It may be necessary to consider both altitude and ambient temperature deration factors to determine true generator output.

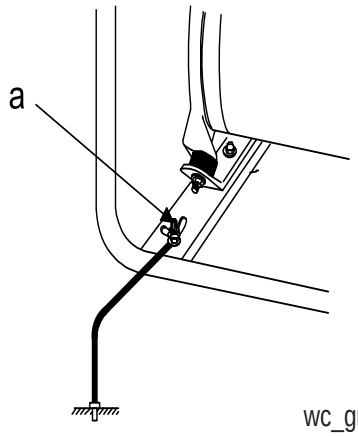
Ambient Temp. °C (°F)	Derate	Factor
45 (113)	3 %	0.97
50 (122)	6 %	0.94
55 (131)	9 %	0.91
60 (140)	12 %	0.88

Altitude m (ft.)	Derate	Factor
1500 (4900)	3 %	0.97
2000 (6600)	6 %	0.94
2500 (8200)	9 %	0.91
3000 (9900)	12 %	0.88
3500 (11500)	15 %	0.85
4000 (13100)	18 %	0.82

2.6 Grounding the Generator

See Graphic: wc_gr000544

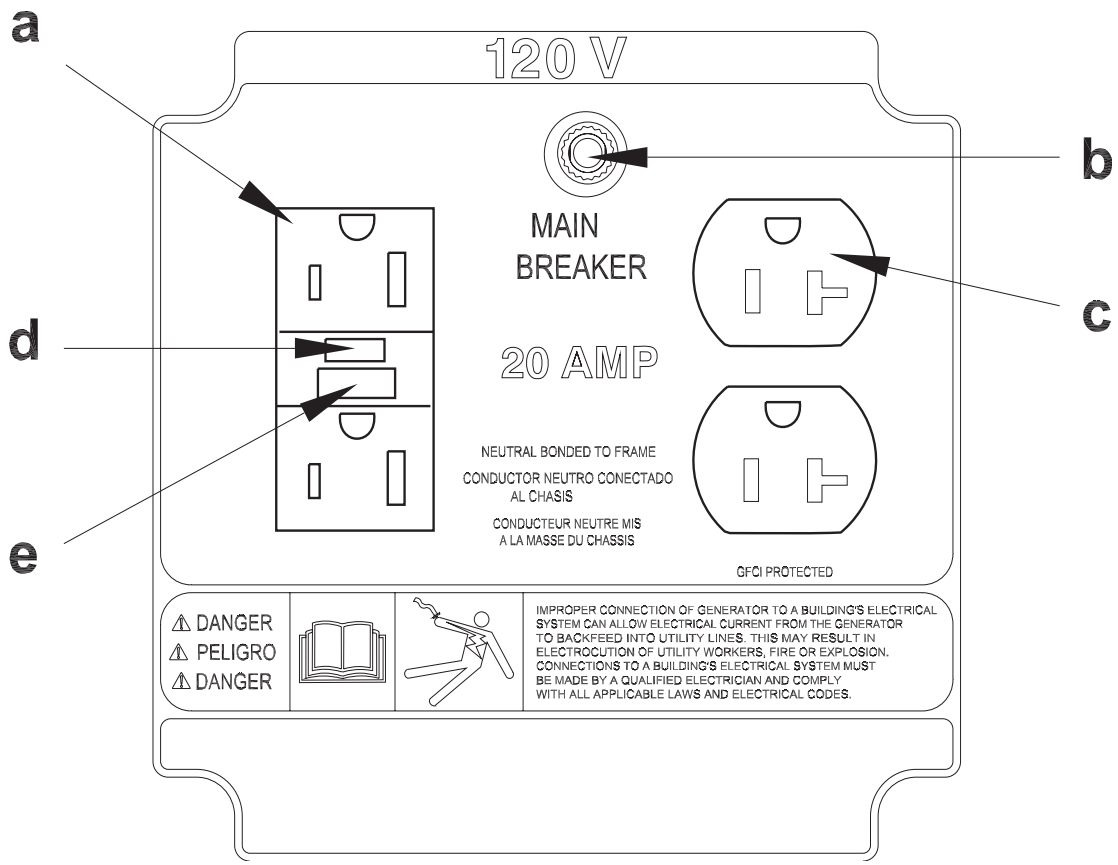
A ground connection **(a)** is located on the generator frame. For proper operating safety, this ground terminal must be connected to a good ground source. This ground connection must comply with National Electrical Code standards, and state and local regulations.



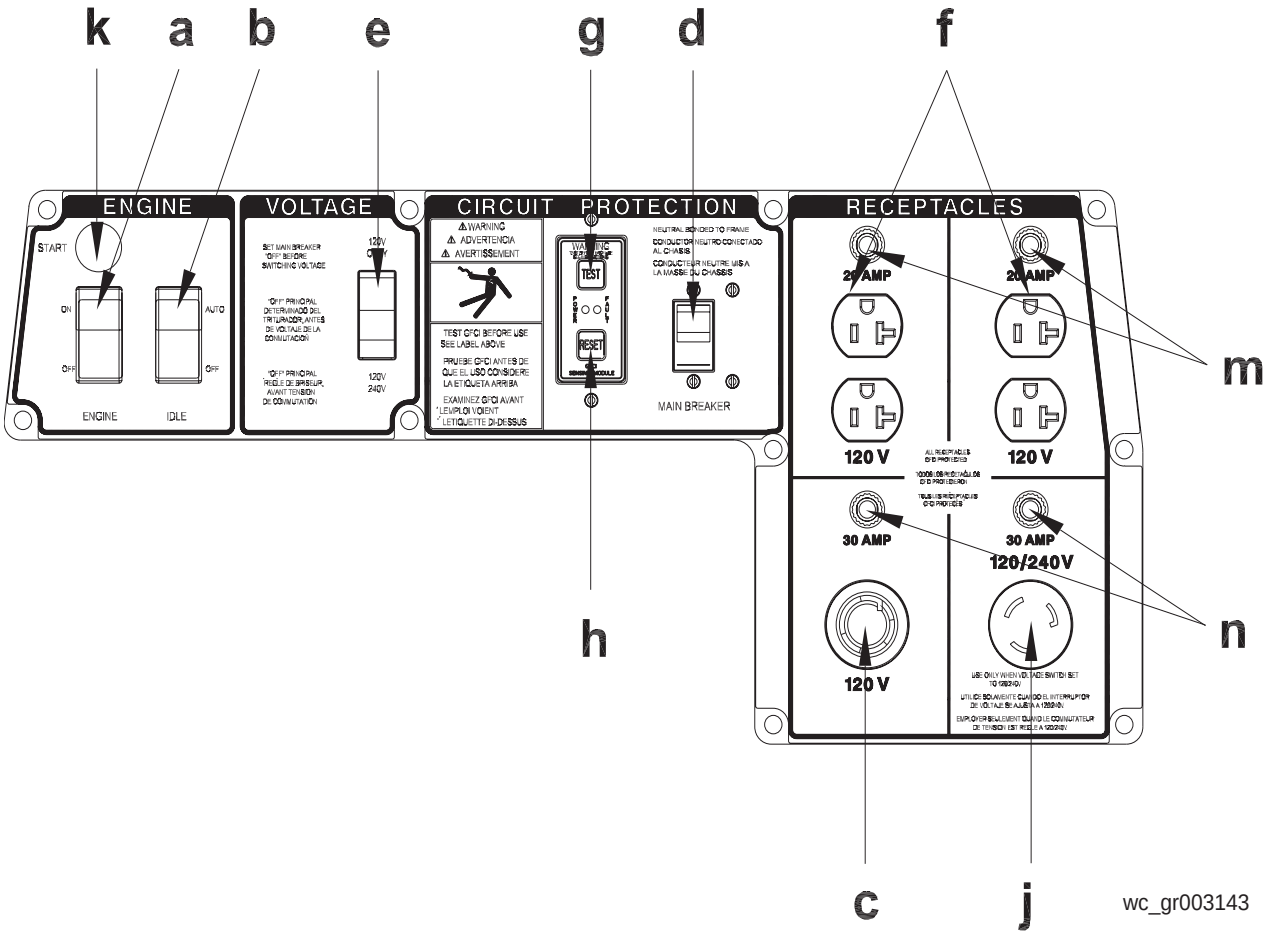
wc_gr000544

2.7 Control Panel–GP 2600

Ref.	Description	Ref.	Description
a	GFI duplex receptacle—120V	d	GFI test button
b	Circuit breaker—20 Amp.	e	GFI reset button
c	Duplex receptacle—120V	f	Engine ON-OFF switch


a
b
c
d
e
120 V
MAIN
BREAKER
20 AMP
NEUTRAL BONDED TO FRAME
CONDUCTOR NEUTRO CONECTADO
AL CHASIS
CONDUCTEUR NEUTRE MIS
A LA MASSE DU CHASSIS
GFCI PROTECTED
⚠ DANGER
⚠ PELIGRO
⚠ DANGER
IMPROPER CONNECTION OF GENERATOR TO A BUILDING'S ELECTRICAL SYSTEM CAN ALLOW ELECTRICAL CURRENT FROM THE GENERATOR TO BACKFEED INTO UTILITY LINES. THIS MAY RESULT IN ELECTROCUTION OF UTILITY WORKERS, FIRE OR EXPLOSION. CONNECTIONS TO A BUILDING'S ELECTRICAL SYSTEM MUST BE MADE BY A QUALIFIED ELECTRICIAN AND COMPLY WITH ALL APPLICABLE LAWS AND ELECTRICAL CODES.

2.8 Control Panel—GP 3800, GP 5600/GP 6600, GPS 5600/GP 6600



See Graphic: wc_gr003143

Ref.	Description	Ref.	Description
a	Engine Switch	g	GFCI test button
b	Auto Idle Switch	h	GFCI reset button
c	Twist-lock receptacle - 120V	j	Twist-lock receptacle - 120/240V
d	Main Circuit Breaker	k	Ignition Switch (GPS only)
e	Voltage Selector Switch	m	20A circuit breaker (CAN only)
f	Duplex receptacle - 120V	n	30A circuit breaker (CAN only)

2.9 Ground Fault Circuit Interrupter (GFCI)

See Graphic: wc_gr003143

The GFCI should be tested for proper operations every time the generator is used.

Normal operating state - sensing device green LED is “ON” and circuit breaker is at “ON” position.

2.9.1 Press “TEST” button **(g)**. Green LED should go “OUT” and red LED should come “ON” and circuit breaker should trigger to “OFF” position **(d)**.

2.9.2 If sensing device LED or breaker does not trip or change state, “DO NOT USE”. Consult an electrician for assistance.

2.9.3 Press “RESET” button **(h)**. Red LED should turn “OFF” and green LED should turn “ON”.

2.9.4 Manually reset (switch) circuit breaker to “ON” position to restore circuit power **(d)**.

2.10 Twist-Lock Receptacles

See Graphic: wc_gr003143

Twist-lock receptacles **(c, j)** are used at the 120V Amp and 120/240V outlets. These receptacles are protected by the GFCI.

To attach a power cord to a twist-lock receptacle, insert plug into receptacle and turn it clockwise to lock it in place.

2.11 Engine Auto Idle

See Graphic: wc_gr003143

The auto idle switch **(b)** automatically reduces engine speed approximately 7 seconds after all appliances or tools attached to the generator have been turned off. The engine automatically returns to full speed when a tool or appliance is turned back on.

To turn the auto idle feature on, push the auto idle switch to “AUTO”. The AUTO setting is recommended while the generator is running to minimize fuel consumption. To avoid extended engine warm-up periods, keep switch set to “OFF” when starting the engine and until the engine reaches operating temperature.

2.12 Engine Speed

Generators require a fixed engine speed to maintain the correct voltage. Engine speed is controlled by a governor which automatically adjusts to varying loads on the engine to maintain a constant speed. See *Technical Data*. There is no throttle control. Use the auto idle switch on the generator to control engine speed.

2.13 Voltage Selection

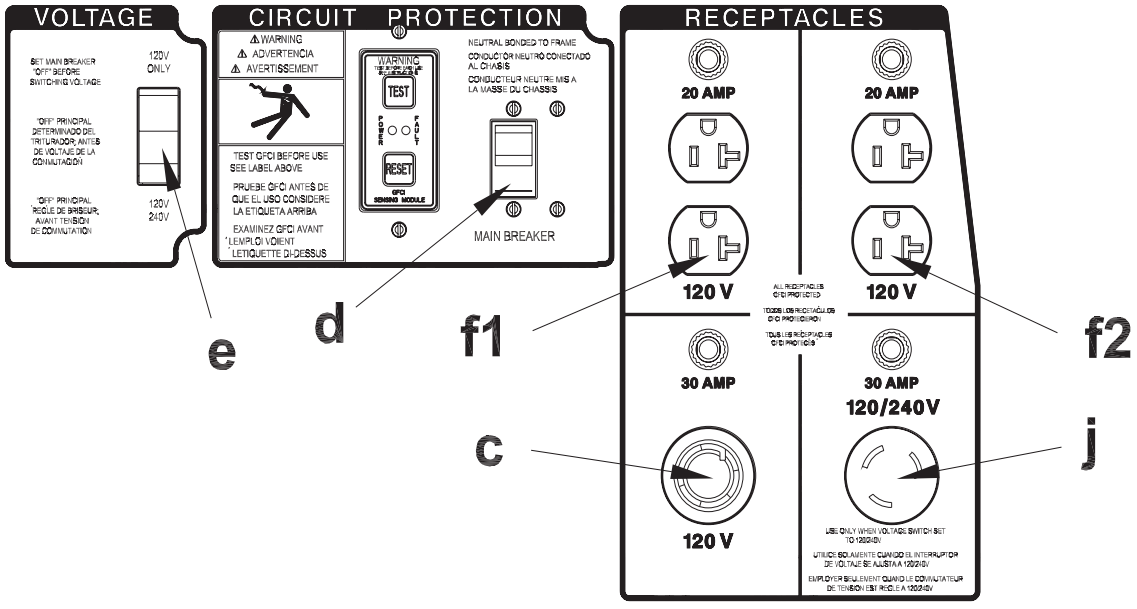
See Graphic: wc_gr003144

The voltage selector switch **(e)** allows the generator to operate in either single (120V) or dual voltage (120/240V) mode.

In single-voltage mode, use only the 120V twist-lock **(c)** and duplex receptacles **(f1**, **f2)**. The full rated power of the generator is shared between the three receptacles.

In dual voltage mode both the 120V and 120/240V receptacles are powered; lower watts are available on receptacles **(f1**, **f2**, **c)**. The 120/240V twist-lock receptacle **(j)** should be used in dual mode only. To achieve full power in this receptacle it should be used alone.

***NOTICE*:** NEVER switch the voltage selector switch with the main breaker on! This can cause arcing and can damage the generator. Turn all tools and appliances off and place main breaker **(d)** in the OFF position before changing voltage switch position.



wc_gr003144

2.14 To Start

See Graphic: wc_gr002500

Before starting, be sure you read and understand all the safety and operating instructions in this manual.

2.14.1 Ensure that the generator is properly installed in an outdoor location. See Sections *Installation* and *Operator Safety while using Internal Combustion Engines* for installation warnings and safety guidelines.

2.14.2 Disconnect all loads from the generator and place the main circuit breaker switch in the OFF position **(a2)**.

2.14.3 Set the auto idle switch to “OFF” **(c)**.

2.14.4 Open the fuel valve **(d1)**.

Note: *If the engine is cold, move the choke lever to the closed position* **(e2)**. *If the engine is warm, set the choke lever to the open position* **(e1)**.

2.14.5 On recoil start engines, turn the engine switch to “ON” **(b1)** and pull the starter rope **(f)**.

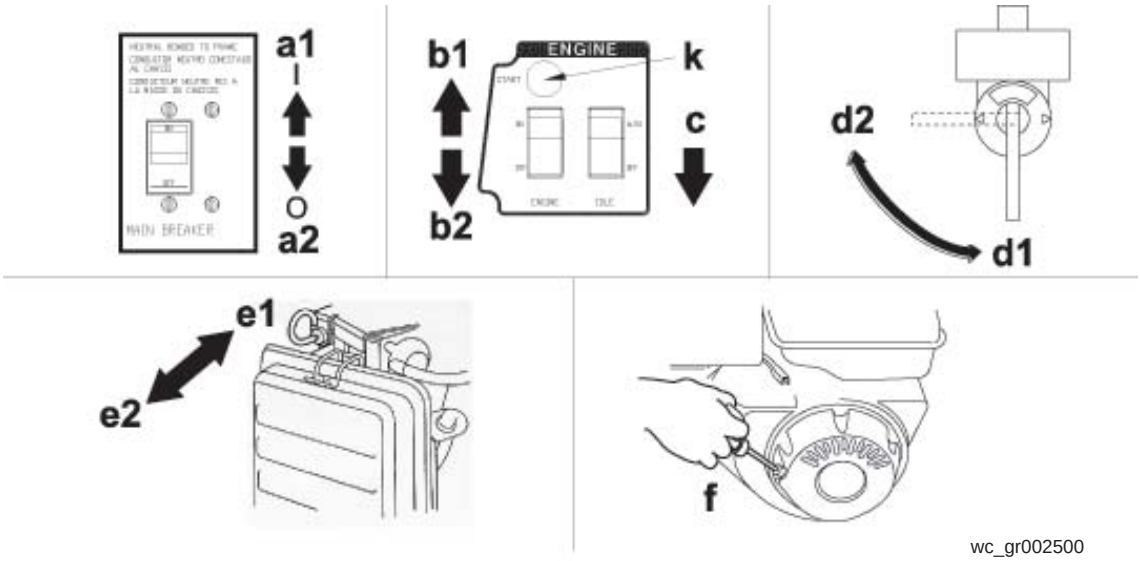
2.14.6 On electric start engines, press the ignition switch **(k)** and hold until the engine starts. Release the switch after the engine starts.

***NOTICE*:** DO NOT run the starter motor more than 5 seconds at a time or damage to the starter motor may occur. If the engine fails to start, release the switch and wait 10 seconds to let the starter motor cool before trying again.

Note: *If the oil level in the engine is low, the engine will not start. If this happens, check the oil level and add oil as needed.*

2.14.7 As the engine warms up, move the choke lever to the OPEN position **(e1)**.

2.14.8 Allow the engine to warm up for a few minutes before placing the main breaker in the "ON" position **(a1)** and attaching loads.



wc_gr002500

2.15 To Stop

See Graphic: wc_gr002500

2.15.1 Turn off and disconnect all tools and appliances attached to the generator.

2.15.2 Place the main circuit breaker in the OFF position **(a2)**.

2.15.3 Turn the engine switch to “OFF” **(b2)**.

2.15.4 Close the fuel valve **(d2)**.

Note: *To stop the engine quickly in an emergency, turn or press the engine switch to “OFF”* **(b2)**.

3 Maintenance

3.1 Engine Maintenance

The chart below lists basic machine and engine maintenance. Refer to your engine operator's manual for additional information on engine maintenance.

3.2 Periodic Maintenance Schedule

	Daily before starting	After first 20 hrs.	Every 50 hrs.	Every 100 hrs.	Every 300 hrs.
Check the fuel level.	■				
Check the engine oil level.	■				
Inspect the air filter. Replace as needed.	■				
Check external hardware.	■				
Clean the air cleaner element.*			■		
Inspect the shockmounts for damage.				■	
Change the engine oil.*		■		■	
Clean the sediment cup or fuel strainer.				■	
Check and clean the spark plug.				■	
Check and adjust the valve clearance.					■
Clean the fuel tank.*					■
Check condition of the fuel lines. Replace when necessary.					■

*Service more frequently in dusty conditions.

3.3 Engine Oil

See Graphic: wc_gr000022

3.3.1 Drain the oil while the engine is still warm.

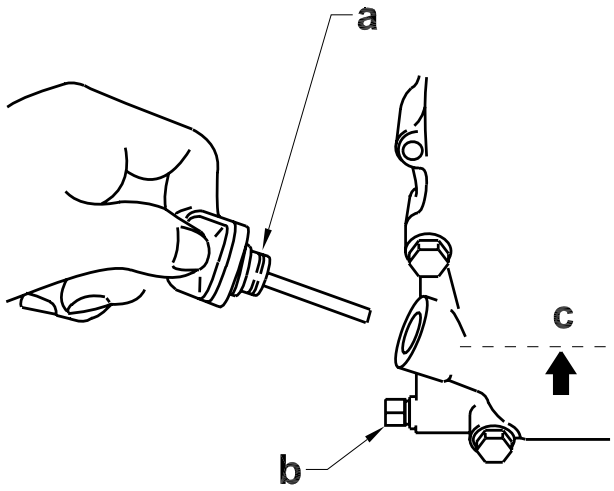
3.3.2 Remove the oil filler plug **(a)** and the drain plug **(b)** to drain the oil.

Note: *In the interests of environmental protection, place a plastic sheet and a container under the machine to collect any liquid that drains off. Dispose of this liquid in accordance with environmental protection legislation.*

3.3.3 Install the drain plug.

3.3.4 Fill the engine crankcase with the recommended oil up to the level of the plug opening **(c)**. See section *Technical Data* for oil quantity and type.

3.3.5 Install the oil filler plug.



wc_gr000022

3.4 Servicing Air Cleaner

See Graphic: wc_gr002815

Service the air cleaner frequently to prevent carburetor malfunction.

***NOTICE*: NEVER** run the engine without the air cleaner. Severe engine damage will occur.

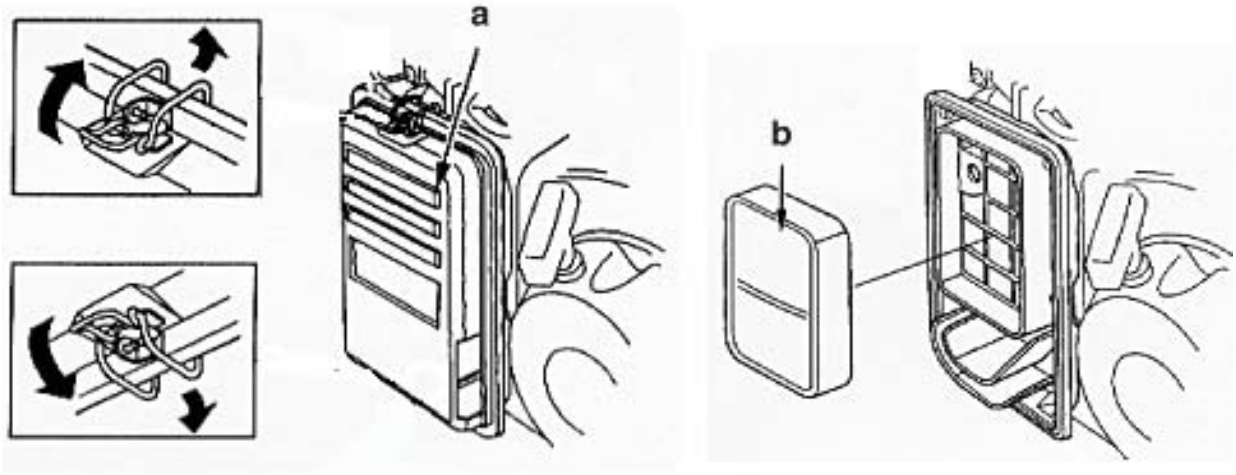
WARNING

NEVER use gasoline or other types of low flash-point solvents for cleaning the air cleaner. A fire or explosion could result.

To service:

3.4.1 Remove the air cleaner cover **(a)**. Inspect the element **(b)** for holes or tears. Replace the element if it is damaged.

3.4.2 Wash the foam element **(b)** in a solution of mild detergent and warm water. Rinse it thoroughly in clean water. Allow the element to dry thoroughly. Soak the element in clean engine oil and squeeze out excess oil.



wc_gr002815

3.5 Spark Plug

See Graphic: wc_gr000028

Clean or replace the spark plug as needed to ensure proper operation. Refer to your engine operator's manual.

WARNING

The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Do not touch the muffler while it is hot.

Note: *Refer to section "Technical Data" for the recommended spark plug type and the electrode gap setting*.

3.5.1 Remove the spark plug and inspect it.

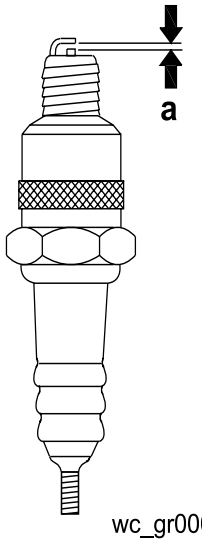
3.5.2 Replace the spark plug if the insulator is cracked or chipped.

3.5.3 Clean the spark plug electrodes with a wire brush.

3.5.4 Set the electrode gap **(a)**.

3.5.5 Tighten the spark plug securely.

***NOTICE*:** *A loose spark plug can become very hot and may cause engine damage*.



wc_gr000028

3.6 Cleaning the Sediment Cup

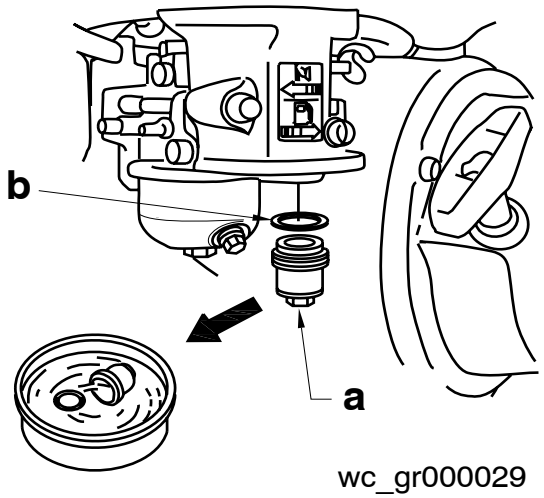
See Graphic: wc_gr000029

3.6.1 Turn the fuel valve off.

3.6.2 Remove the sediment cup **(a)** and the O-ring **(b)**.

3.6.3 Wash both thoroughly in a nonflammable solvent. Dry and reinstall them.

3.6.4 Turn the fuel valve on and check for leaks.



wc_gr000029

3.7 Carburetor Adjustment

See Graphic: wc_gr000032

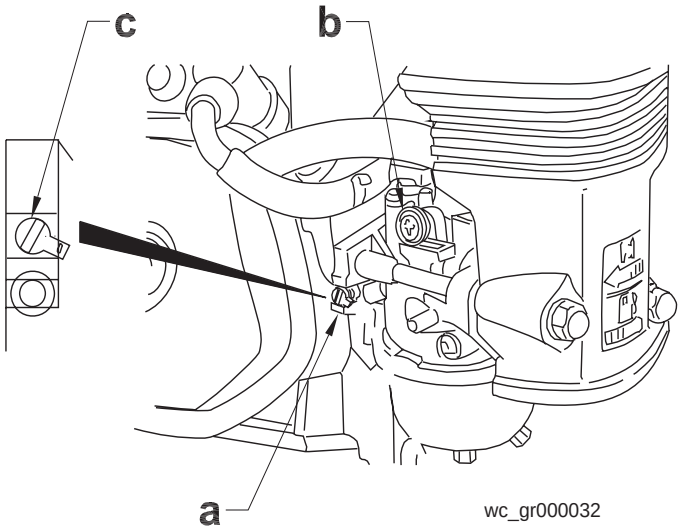
3.7.1 Start the engine and allow it to warm up to operating temperature.

3.7.2 Set the pilot screw **(a)** two turns out. See *Note*.

3.7.3 With the engine idling, turn the pilot screw **(a)** in or out to the setting that produces the highest rpm.

3.7.4 After the pilot screw is adjusted, turn the throttle stop screw **(b)** to obtain the standard idle speed. See *Technical Data*.

Note: *On some engines the pilot screw is fitted with a limiter cap* **(c)** *to prevent excessive enrichment of the air-fuel mixture in order to comply with emission regulations. The mixture is set at the factory and no adjustment should be necessary. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the pilot screw.*



3.8 Adjusting Engine Speed

See Graphic: wc_gr000032

Generators require a fixed engine speed to maintain the correct voltage. Engine speed is controlled by a governor which automatically adjusts to varying loads on the engine to maintain a constant speed. There is no throttle control.

To set the engine to the proper speed:

Turn the speed adjusting screw **(b)** in or out to obtain a no-load speed. See *Technical Data*.

***NOTICE*:** Setting the engine speed too high or too low may damage tools and other appliances attached to the generator.

3.9 Storage

Before storing the generator for a long period of time:

3.9.1 Close the fuel valve and remove and empty the sediment cup or fuel strainer.

3.9.2 Disconnect the fuel line from the carburetor. Place the open end of the fuel line into a suitable container and open the fuel valve to drain the fuel from the tank.

WARNING

Gasoline is extremely flammable. Drain the fuel tank in a well-ventilated area. DO NOT drain the fuel tank in an area with flames or sparks.

3.9.3 Loosen the drain screw on the carburetor and drain any remaining fuel from the carburetor.

3.9.4 Change the engine oil.

3.9.5 Remove the spark plug and pour approximately 30 ml (1 ounce) of clean engine oil into the cylinder. Crank the engine a few turns to distribute the oil to the inside of the cylinder walls.

3.9.6 Pull the starter rope slowly until resistance is felt and leave the handle in this position. This ensures that the intake and exhaust valves are closed.

3.9.7 Store the generator in a clean, dry area.

3.10 Transport

WARNING

Let the engine cool before transporting the generator or storing indoors, to avoid burns or fire hazards.

When transporting the generator:

3.10.1 Turn the engine fuel valve to the OFF position.

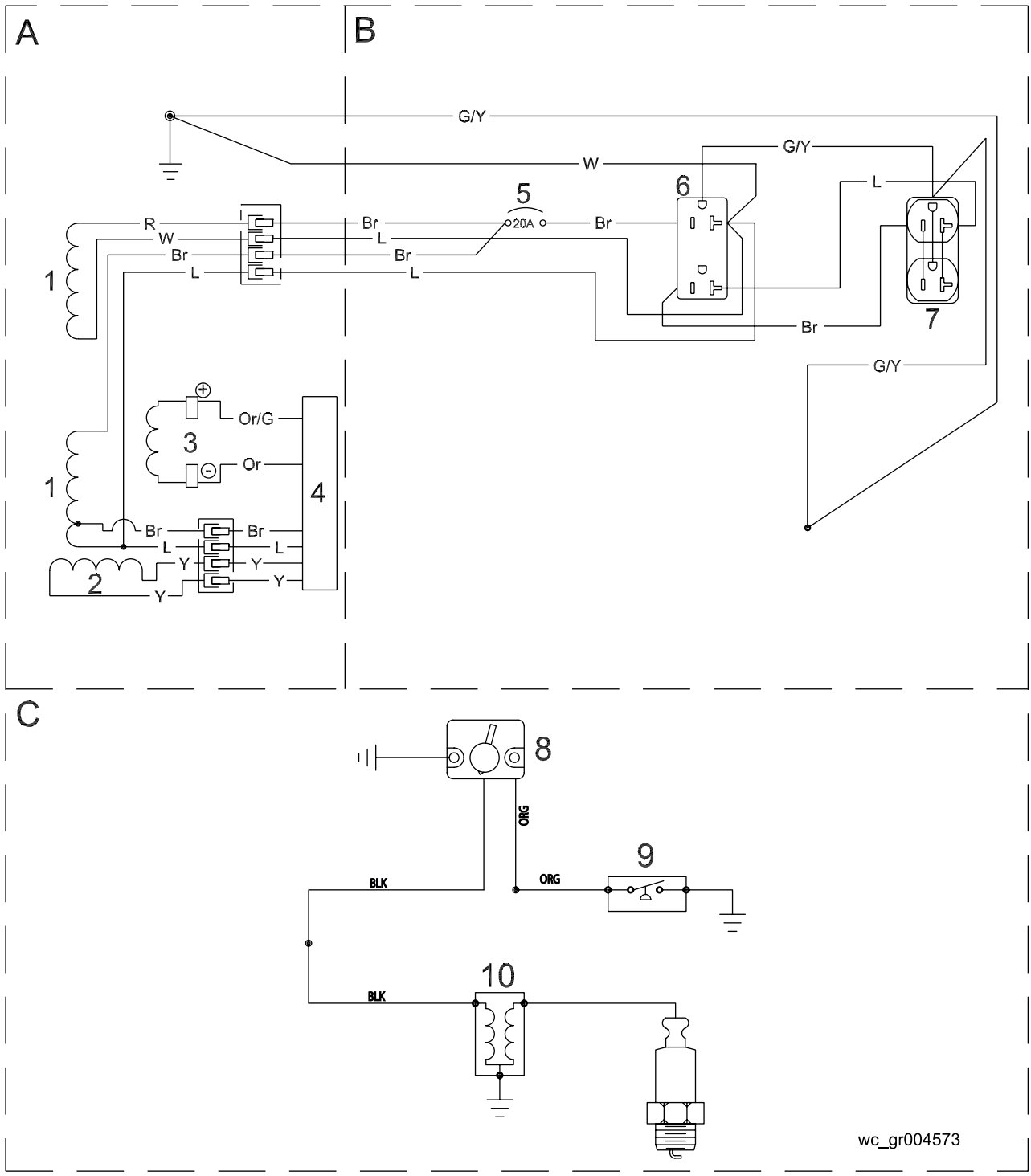
3.10.2 Position the generator level to prevent fuel from spilling.

3.10.3 Secure the generator by tying it down with a suitable rope.

WARNING

When transporting the machine by hand, be sure to employ manpower commensurate with the weight of the machine. To avoid back injury when lifting the machine, bend the knees to pick it up rather than bending at your waist.

3.11 Electrical Schematic—GP 2600



3.12 Components—GP 2600

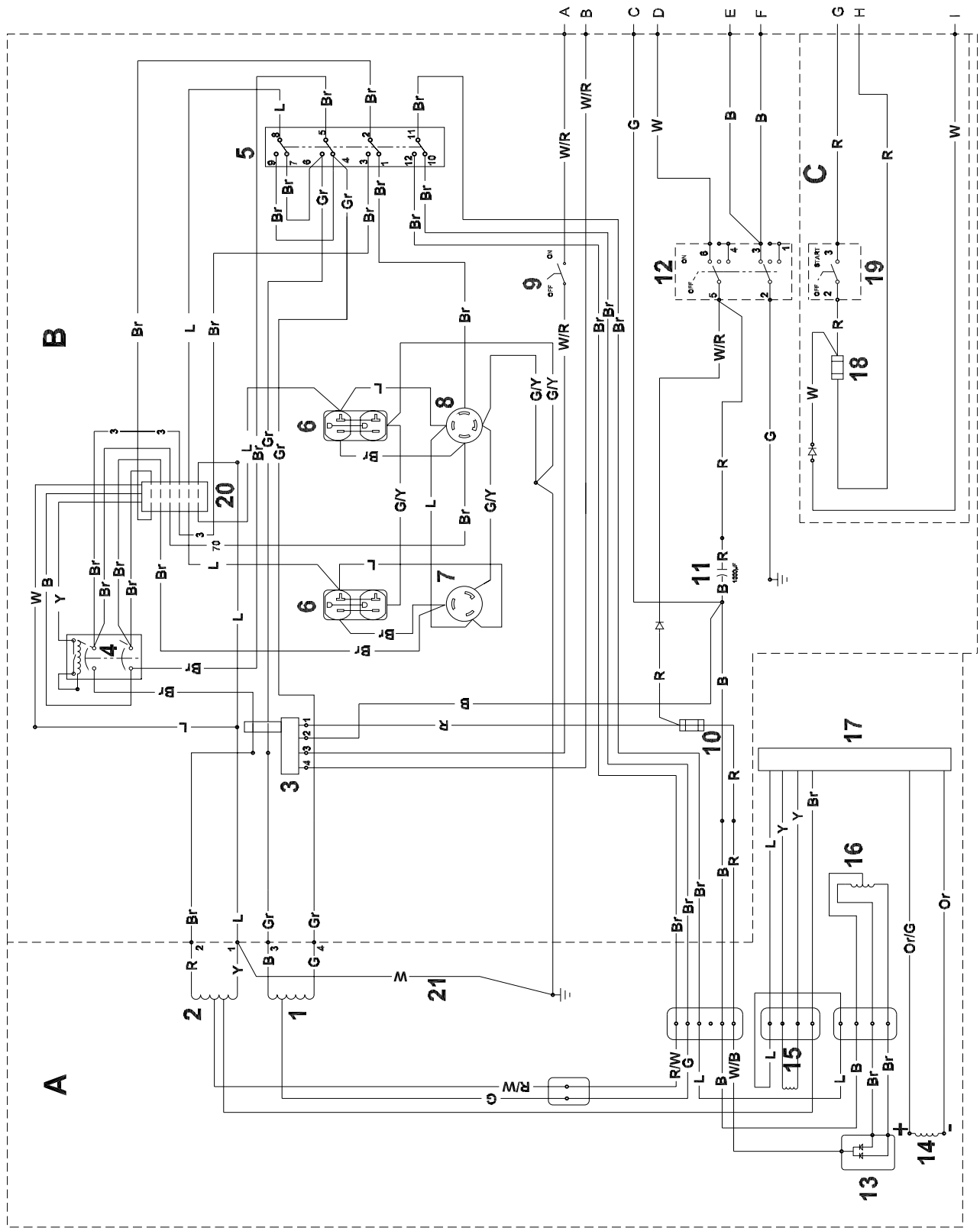
Ref.	Description	Ref.	Description	Ref.	Description
A	Generator	B	Control Box	C	Engine

Ref.	Description	Ref.	Description
1	Main stator winding	7	Duplex receptacle—120V
2	Secondary winding	8	Engine stop switch module
3	Rotor winding	9	Oil level sender
4	Automatic voltage regulator	10	Coil
5	20A circuit breaker		
6	GFI duplex receptacle—120V		

Wire Colors

Wire Colors							
B	Black	R	Red	Y	Yellow	Or	Orange
G	Green	T	Tan	Br	Brown	Pr	Purple
L	Blue	V	Violet	Cl	Clear	Sh	Shield
P	Pink	W	White	Gr	Gray	LL	Light blue

3.13 Electrical Schematic—GP 3800, GP/GPS 5600, GP/GPS 6600



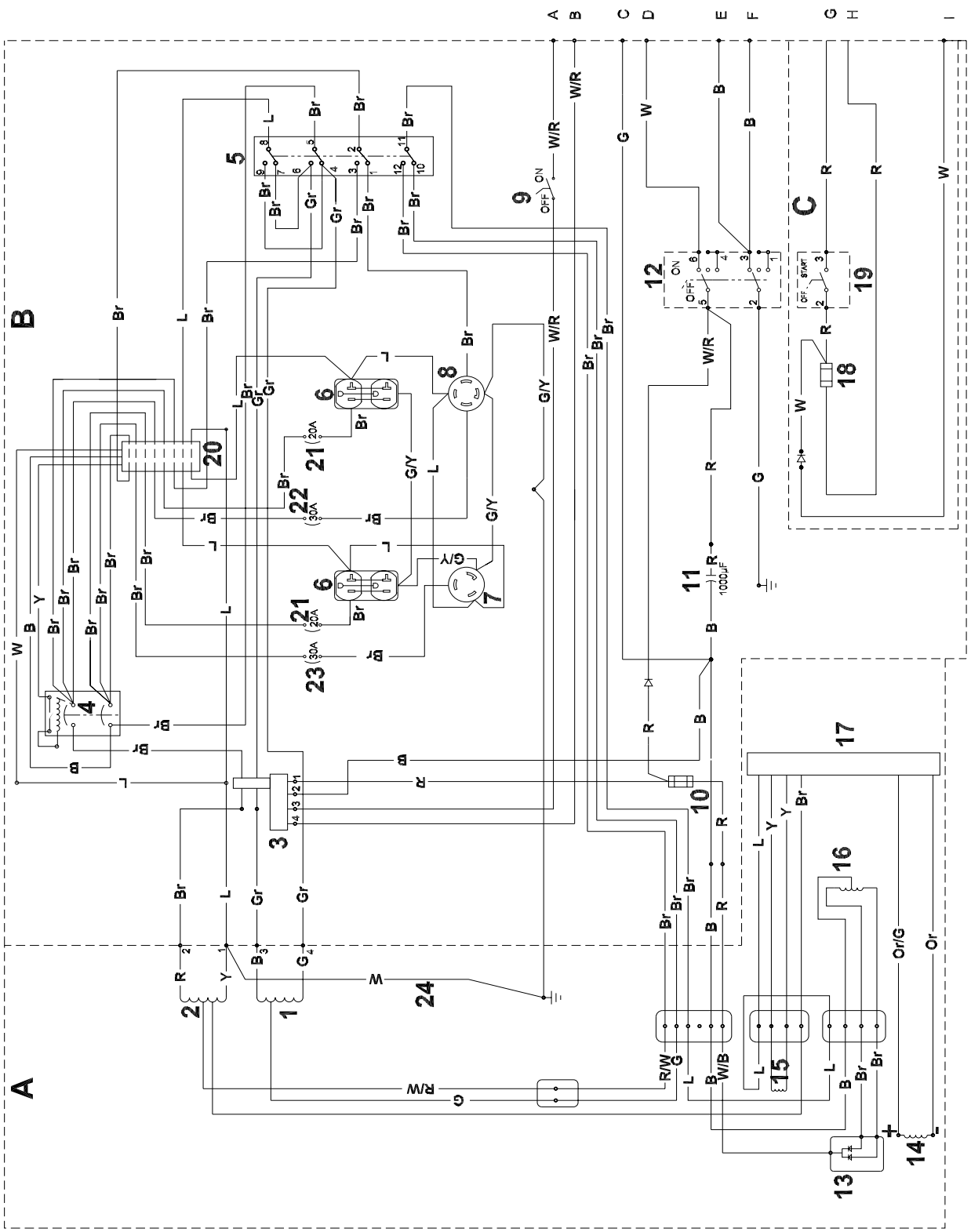
3.14 Components—GP 3800, GP/GPS 5600, GP/GPS 6600

Ref.	Description	Ref.	Description
A	Generator	D	Honda Engine
B	Control box	E	Wacker Neuson Engine
C	Electric start engines (GPS)		

Ref.	Description	Ref.	Description
1	Main stator winding 1	12	Engine ON / OFF switch
2	Main stator winding 2	13	Rectifier
3	Auto idle unit	14	Rotor winding/brushes
4	Main circuit breaker	15	Secondary (excitation) winding
5	Voltage selector switch (120/240V position shown)	16	DC winding
6	Duplex receptacle—120V	17	Automatic voltage regulator (AVR)
7	Twist-lock receptacle—120V	18	15A fuse (GPS only)
8	Twist-lock receptacle—120/240V	19	Ignition switch (GPS only)
9	Auto idle switch	20	GFCI
10	5A fuse	21	Neutral bond wire
11	Capacitor		

Wire Colors							
B	Black	R	Red	Y	Yellow	Or	Orange
G	Green	T	Tan	Br	Brown	Pr	Purple
L	Blue	V	Violet	Cl	Clear	Sh	Shield
P	Pink	W	White	Gr	Gray	LL	Light blue

3.15 Electrical Schematic—GP 3800, GP/GPS 5600, GP/GPS 6600 CAN Models



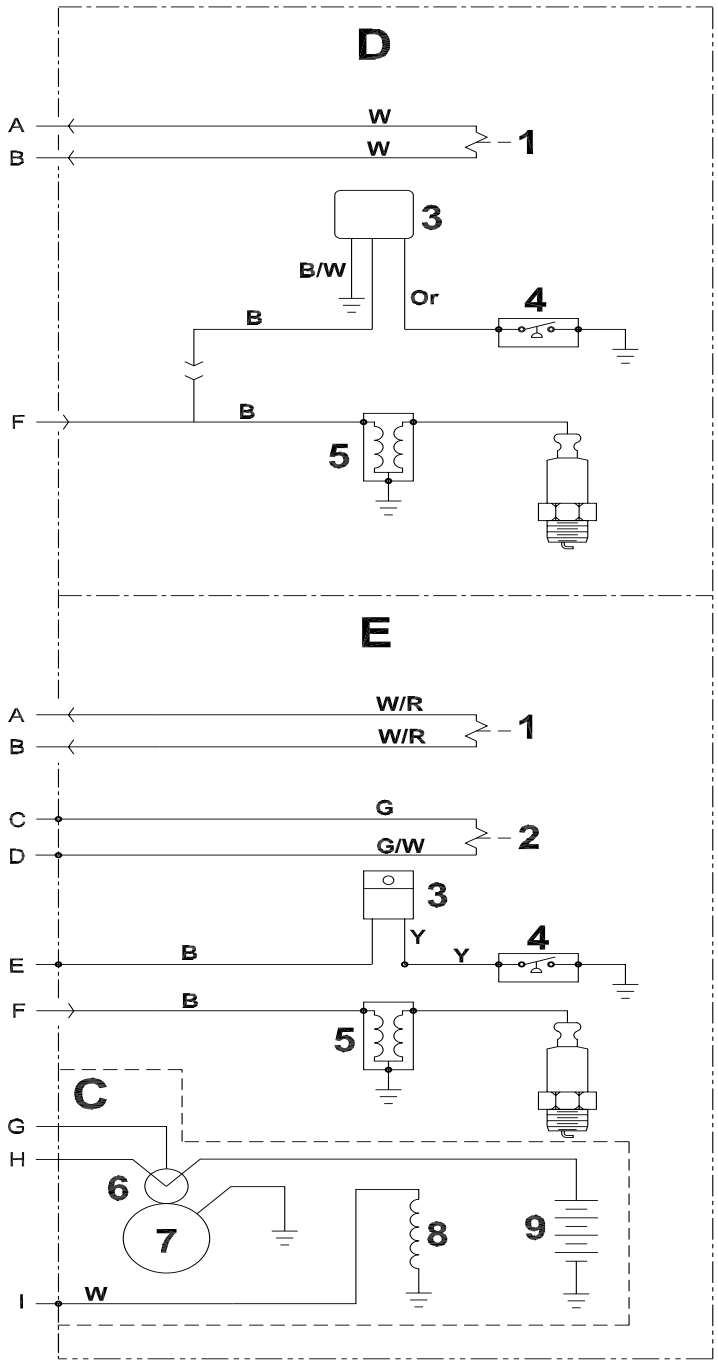
3.16 Components—GP 3800, GP/GPS 5600, GP/GPS 6600 CAN models

Ref.	Description	Ref.	Description
A	Generator	D	Wacker Engine
B	Control box	E	Honda Engine
C	Electric start engines (GPS)		

Ref.	Description	Ref.	Description
1	Main stator winding 1	13	Rectifier
2	Main stator winding 2	14	Rotor winding/brushes
3	Auto idle unit	15	Secondary (excitation) winding
4	Main circuit breaker	16	DC winding
5	Voltage selector switch (120/240V position shown)	17	Automatic voltage regulator (AVR)
6	Duplex receptacle—120V	18	15A fuse (GPS only)
7	Twist-lock receptacle—120V	19	Ignition switch (GPS only)
8	Twist-lock receptacle—120/240V	20	GFCI
9	Auto idle switch	21	20A circuit breaker
10	5A fuse	22	20A circuit breaker (GP 3800 CAN and GP4000 only)
11	Capacitor	23	30A circuit breaker (GP 5600/6600 CAN only)
12	Engine ON / OFF switch	24	Neutral bond wire

Wire Colors							
B	Black	R	Red	Y	Yellow	Or	Orange
G	Green	T	Tan	Br	Brown	Pr	Purple
L	Blue	V	Violet	Cl	Clear	Sh	Shield
P	Pink	W	White	Gr	Gray	LL	Light blue

3.17 Engine Electrical Schematic—GP 3800, GP/GPS 5600, GP/GPS 6600

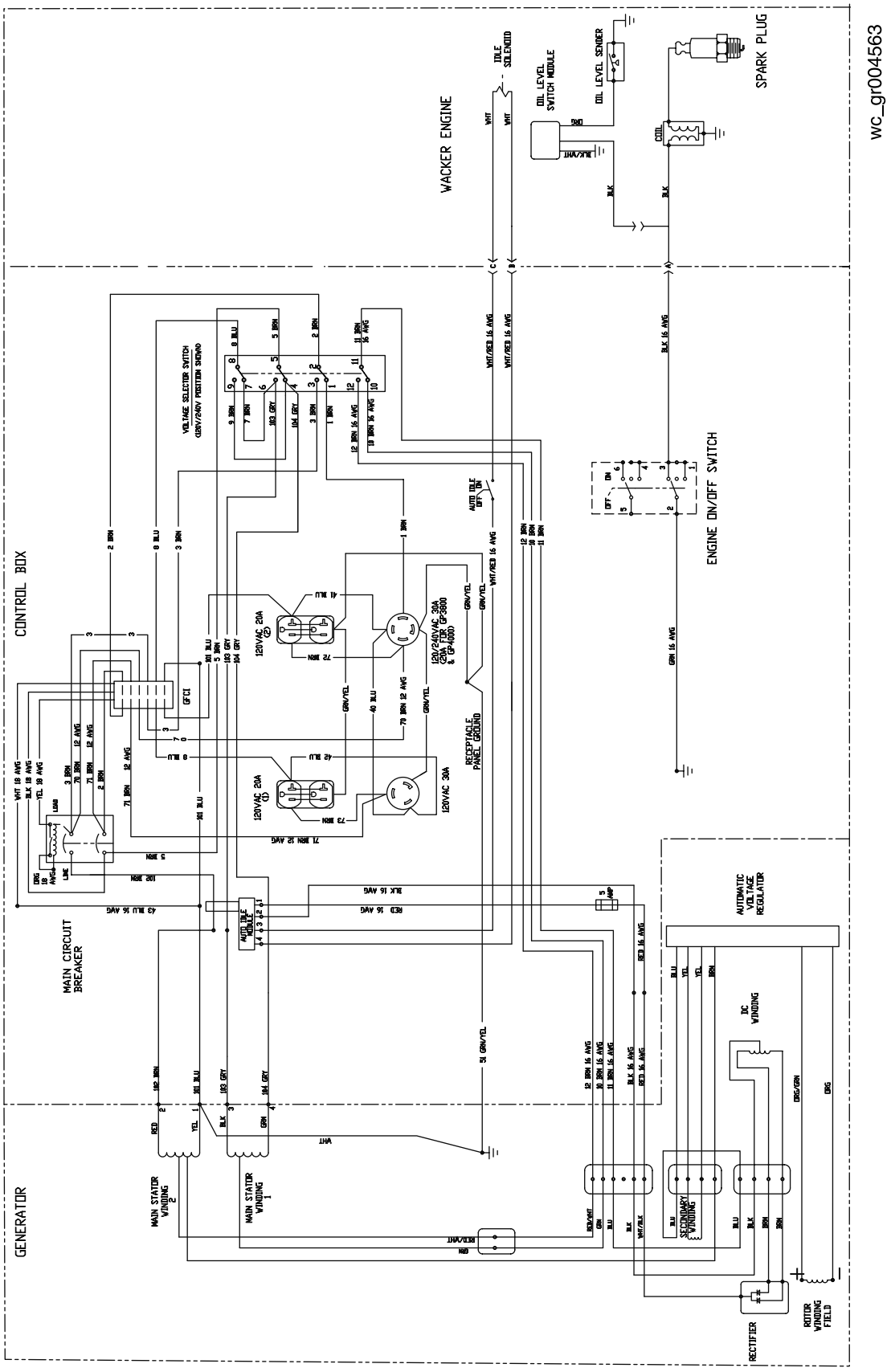


3.18 Engine Components

Ref.	Description	Ref.	Description
A	Generator	E	Honda Engine
B	Control box		
C	Electric start engines (GPS)		

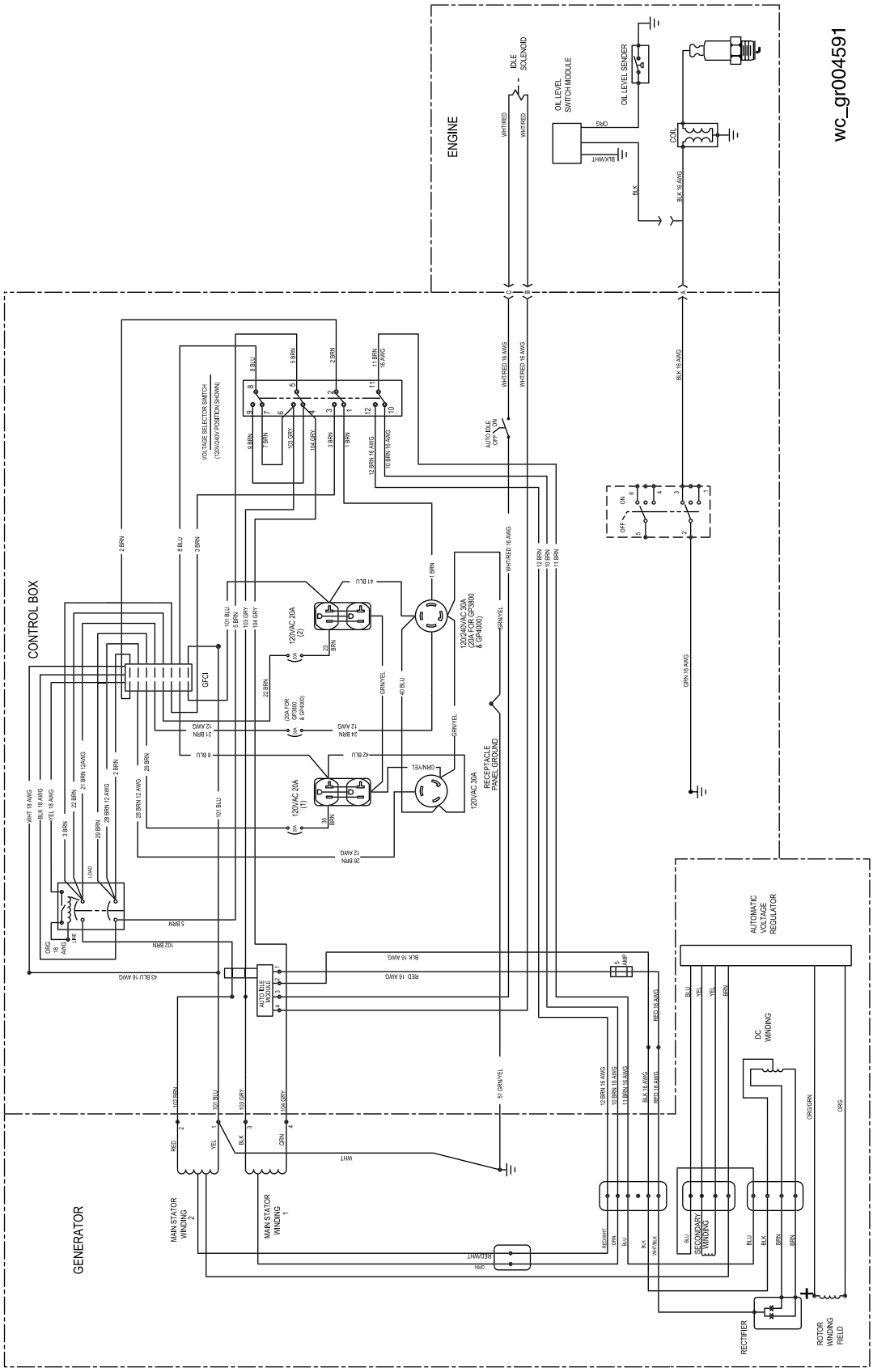
Ref.	Description	Ref.	Description
1	Idle solenoid	6	Solenoid (GPS only)
2	Fuel cut solenoid	7	Starter (GPS only)
3	Oil alert module	8	Charging coil (GPS only)
4	Oil level switch	9	Battery (GPS only)
5	Coil		

3.19 Electrical Schematic—GP 4000



Wire Colors							
BLK	Black	BRN	Brown	GRY	Gray	WHT	White
BLU	Blue	GRN	Green	RED	RED	YEL	Yellow

3.20 Electrical Schematic—GP 4000 CAN



Wire Colors							
BLK	Black	BRN	Brown	GRY	Gray	WHT	White
BLU	Blue	GRN	Green	RED	RED	YEL	Yellow

4 Troubleshooting

4.1 Troubleshooting Methodology

See Graphic: wc_gr003415

If a generator problem is not an obvious engine or wire fault, the cause of the problem will be associated with one of two things: a malfunctioning generator or faults in the circuit supplying voltage to the receptacles. By starting the troubleshooting procedures at the generator output terminal strip **(z)** you can determine whether the problem lies within the generator or the circuit supplying the receptacles.

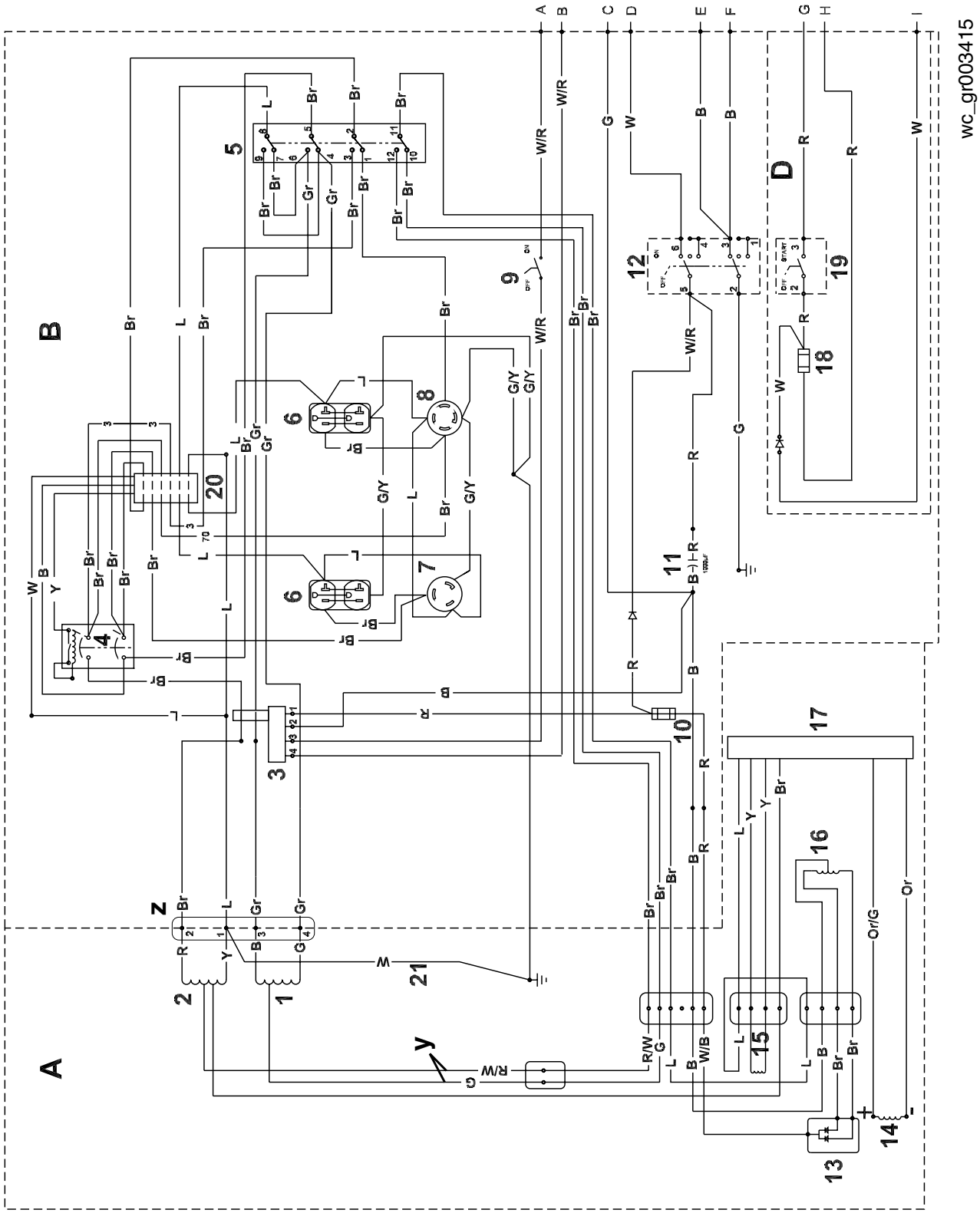
For troubleshooting a no-voltage condition, you'll need to rule out problems with the stator windings **(1)** and the rotor windings **(13)**. For a low-voltage condition (any voltage less than 120V), you'll need to rule out problems with the stator and rotor windings, a malfunctioning voltage regulator **(16)**, and problems with the brushes **(13)** and/or the excitation winding **(15)**. For a high-voltage condition, you'll need to rule out a malfunctioning voltage regulator and/or problems with the voltage regulator's sensing wires **(y)**.

For troubleshooting the receptacle circuits, you'll need to rule out problems with the main circuit breaker **(3)**, the individual circuit breakers **(5**, **6**, **and 7),** and the wiring that connects all the components.

For troubleshooting a malfunctioning auto idle circuit, you'll need to rule out a blown fuse **(9)** and problems with the idle solenoid, the DC winding **(15)**, the rectifier **(12)**, the auto idle switch **(8)**, the auto idle unit **(2)**, and the wiring that connects all the components.

For troubleshooting a malfunctioning anti-afterfire circuit, you'll need to rule out a faulty DC winding **(15)**, a blown fuse **(9)**, a faulty engine ON/OFF switch **(11)**, or a faulty capacitor **(10)**.

Detailed procedures for making the tests are included in the upcoming sections of this manual.


wc_gr003415
A
B
C
D
E
F
G
H
I
W/R
G
W
B
R
Br
L
Gr
Y
G/Y
R/W
W/B
Or
Or/G
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
D
z
y

4.2 Checking Continuity

Conduct continuity tests when the engine is shut down.

When checking continuity, use the Ohm setting on your multimeter. Place a lead of the multimeter on one end of the wiring or component and the other lead on the opposite end. If your meter reads “OL” or “OPEN”, there is no continuity and the wiring or component must be repaired or replaced.

Note: *Some multimeters also have an audio signal setting for determining continuity. This setting may also be used.*

- If your meter reads less than 1.0 Ohm, or the audio signal sounds, the wiring or component has continuity and should be OK.
- If your meter reads more than 1.0 Ohm, the wiring is faulty and must be repaired or replaced.

4.3 Checking Resistance

Conduct resistance checks when the engine is shut down.

Use the Ohm setting on your multimeter.

Conduct resistance checks when the machine is as close to 21°C (70°F) as possible. Higher temperatures can affect resistance values.

Most digital multimeters have some internal resistance. To obtain your multimeter’s internal resistance, simply cross the two leads of your multimeter and read the display. When conducting a resistance check, subtract your multimeter’s internal resistance from the value you measure to obtain the true resistance of the component you are checking.

4.4 Checking Voltage

Conduct voltage checks when the engine is running.

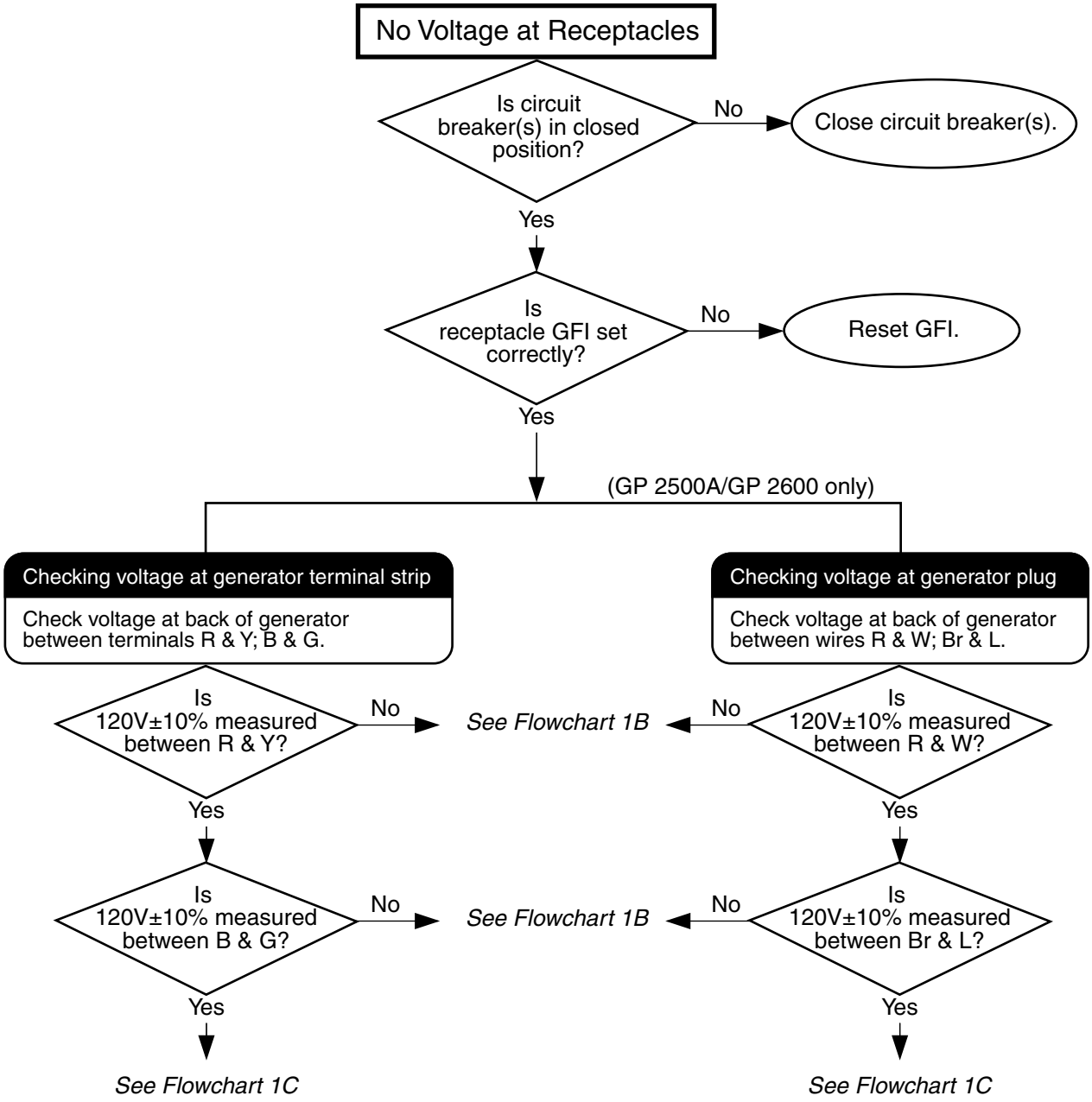
Use the Volt setting on your multimeter. To prevent damage to your instrument, start with the highest scale available on your multimeter. Adjust to a lower scale as readings dictate.

Use extreme caution when checking voltage to reduce the risk of electric shock.

4.5 Troubleshooting Flowcharts

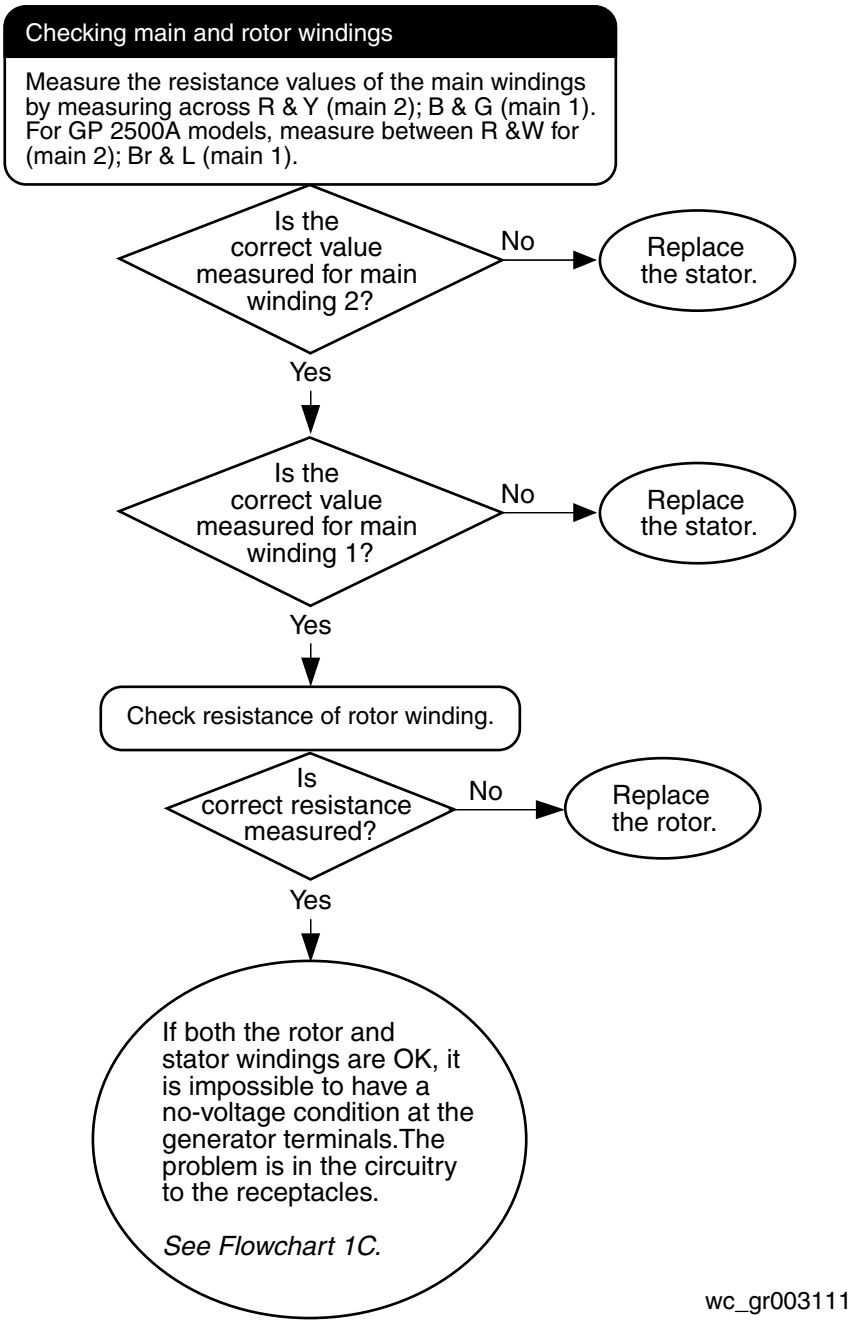
The troubleshooting flowcharts are designed to take you through the process of determining the source of a problem with engine starting or machine operation. Many of the tests involve live voltages and therefore should only be attempted by qualified personnel. Detailed procedures for carrying out the tests are included in this manual. All highlighted text within the flowcharts have matching sections in this manual.

4.6 No Voltage at Receptacles—Flowchart 1A



wc_gr003110

4.7 No Voltage at Receptacles—Flowchart 1B


Checking main and rotor windings
Measure the resistance values of the main windings by measuring across R & Y (main 2); B & G (main 1). For GP 2500A models, measure between R &W for (main 2); Br & L (main 1).
Is the correct value measured for main winding 2?
No
Replace the stator.
Yes
Is the correct value measured for main winding 1?
No
Replace the stator.
Yes
Check resistance of rotor winding.
Is correct resistance measured?
No
Replace the rotor.
Yes
If both the rotor and stator windings are OK, it is impossible to have a no-voltage condition at the generator terminals.The problem is in the circuitry to the receptacles.
See Flowchart 1C.

wc_gr003111

4.8 Checking Voltage at Generator Terminal Strip

See Graphic: wc_gr003122

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

By starting the troubleshooting procedures at the generator output terminal strip you can determine whether the problem lies within the generator or the circuit supplying the receptacles. To check the voltage at the terminal strip, carry out the following procedures:

4.8.1 Remove the two screws **(a)** that secure the end cover to the generator and remove the end cover.

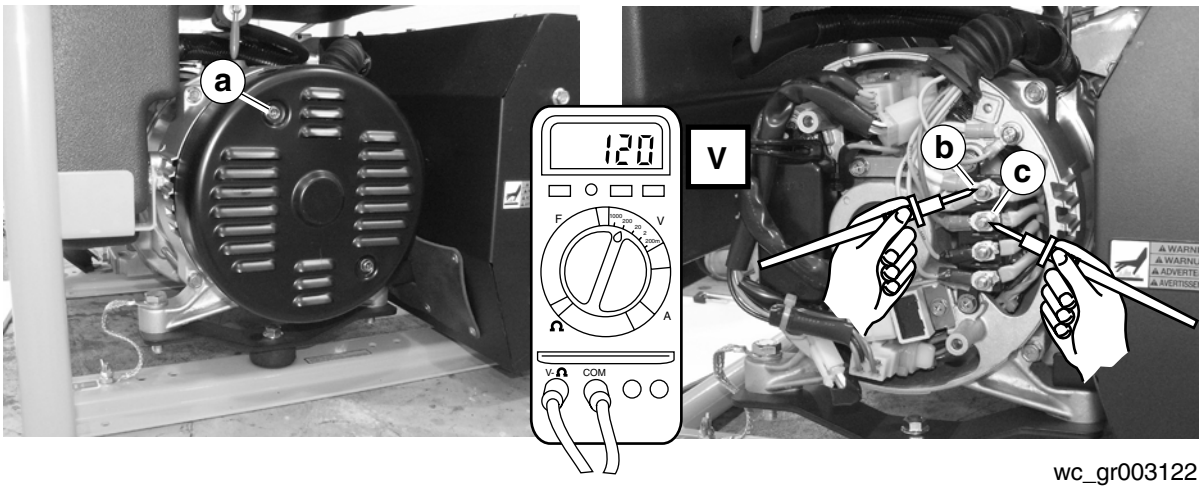
4.8.2 Start the engine.

4.8.3 Using the AC voltage setting on the multimeter, measure the voltage between the wire with the yellow marking **(b)** and the wire with the red marking **(c)**. There should be 120V±10%.

- If zero (0) volts is measured, it indicates a problem with main winding 2 or the rotor winding.
- If 120V±10% is measured, main winding 2 and the rotor are functioning; continue.

4.8.4 Using the AC voltage setting on the multimeter, measure the voltage between the wire with the green marking and the wire with the black marking. There should be 120V±10%.

- If zero (0) volts is measured, it indicates a problem with main winding 1.
- If 120V±10% is measured, main winding 1 and the rotor are functioning; any problems with the receptacles receiving voltage are in the circuit to the receptacles.



wc_gr003122

4.9 Checking Voltage at Plug—GP 2500A, GP 2600

See Graphic: wc_gr003146

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

By starting the troubleshooting procedures at the generator output plug **(d)**, you can determine whether the problem lies within the generator or the circuit supplying the receptacles. To check the voltage at the output plug, carry out the following procedures:

4.9.1 Remove the two screws which secure the end cover to the generator and remove the end cover.

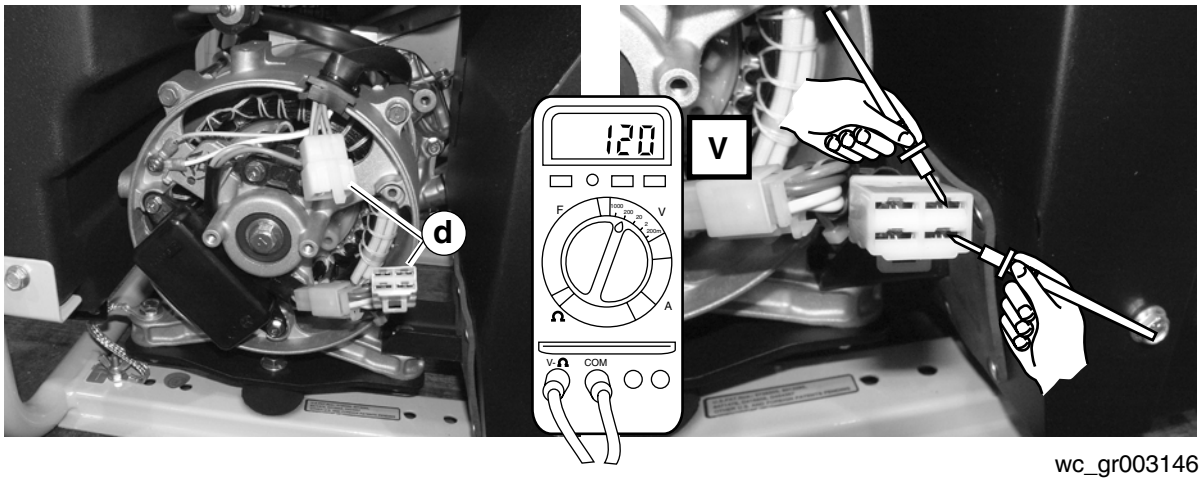
4.9.2 Start the engine.

4.9.3 Using the AC voltage setting on the multimeter, measure the voltage between the red wire and the white. There should be 120V±10%.

- If zero (0) volts is measured, it indicates a problem with main winding 2 or the rotor winding.
- If 120V±10% is measured, main winding 2 and the rotor are functioning; continue.

4.9.4 Using the AC voltage setting on the multimeter, measure the voltage between the brown wire and the blue wire. There should be 120V±10%.

- If zero (0) volts is measured, it indicates a problem with main winding 1.
- If 120V±10% is measured, main winding 1 and the rotor are functioning; any problems with the receptacles receiving voltage are in the circuit to the receptacles.



wc_gr003146

4.10 Checking Main and Rotor Windings

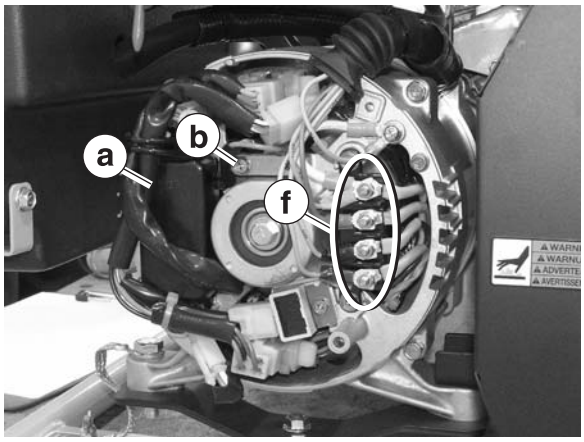
To check the resistance of the windings, carry out the following procedures:

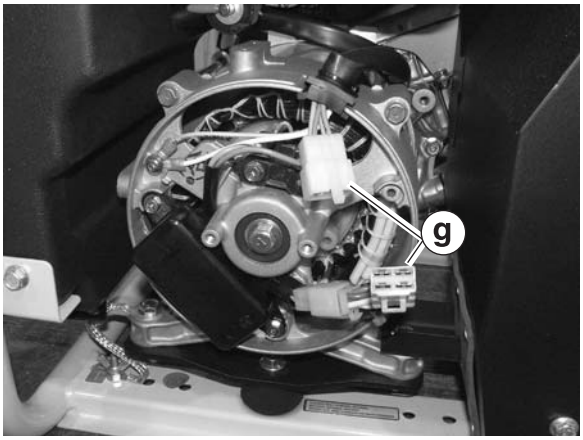
4.10.1 Stop the engine.

4.10.2 Remove the two screws which secure the end cover to the generator and remove the end cover.

4.10.3 Disconnect the Automatic Voltage Regulator (AVR) **(a)**.

4.10.4 Remove the screw **(b)** that secures the brushes and remove the brushes.





wc_gr006430

4.10.5 Disconnect the yellow-, red-, black-, and green-marked wires **(f)** from the terminal strip. On GP 2500A/GP 2600 models, disconnect the voltage plug **(g)**.

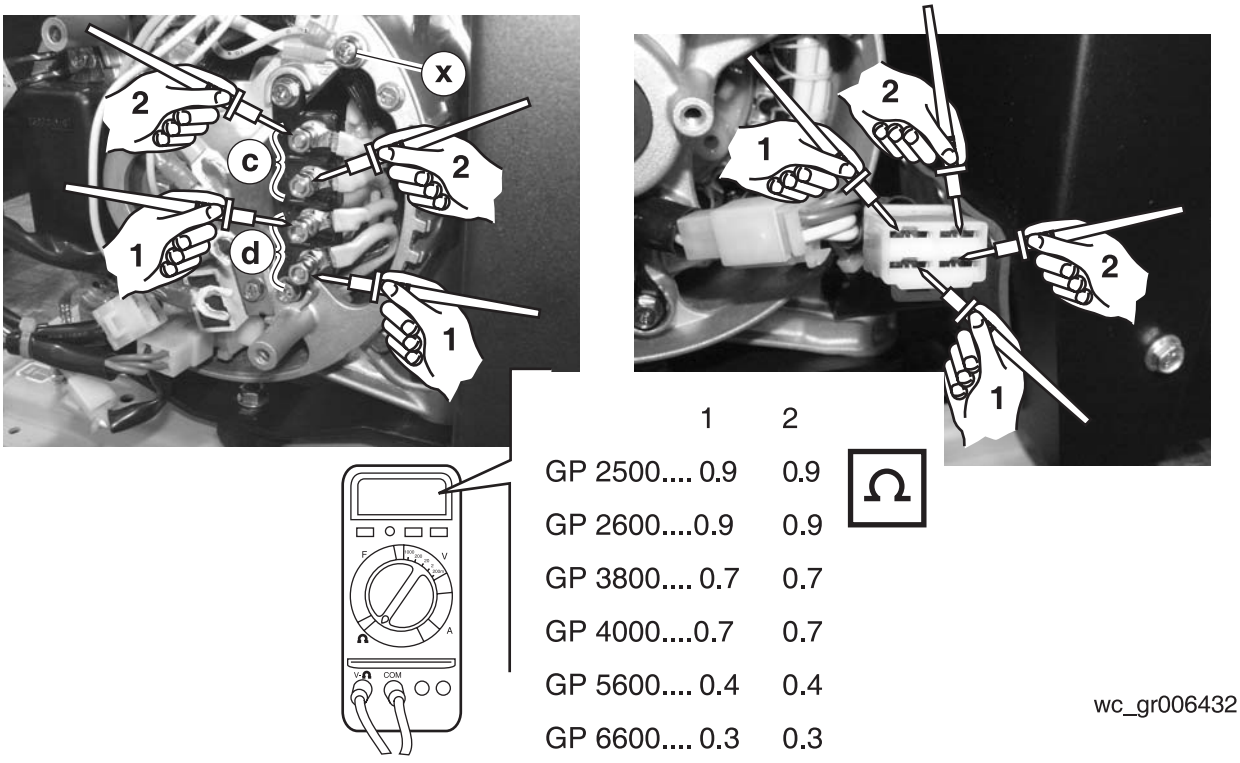
Continued

4.10.6 Using the Ohms setting on the multimeter, measure the resistance of main winding 2 by measuring across the upper two terminals **(c)** (yellow and red). On GP 2500A/GP 2600 models, measure across the red and white wires. Also check the resistance of main winding 1 by measuring across the two lower terminals **(d)** (black and green). On GP 2500A/GP 2600 models, measure across the brown and blue wires. Each generator size will have a different value. Check the chart in the graphic for the correct values; use a tolerance of +0.5/-0.0 Ohm.

- If the correct resistance is not measured, the main windings are bad; replace the stator.
- If the correct resistance is measured, continue.

4.10.7 Check each winding to ground. (Measure resistance between the winding and the ground stud **(x)** of the stator. Measure both sides of the winding.)

- If either winding has resistance to ground, it has failed.
- If both windings show no resistance to ground, they are OK.



	1	2
GP 2500....	0.9	0.9
GP 2600....	0.9	0.9
GP 3800....	0.7	0.7
GP 4000....	0.7	0.7
GP 5600....	0.4	0.4
GP 6600....	0.3	0.3

wc_gr006432

Continued

4.10.8 Using the Ohms setting on the multimeter, measure the resistance of the rotor winding by measuring across the slip rings **(e)**. Each generator size will have a different value. Check the chart in the graphic for the correct values; use a tolerance of +1.0/-0.0 Ohm.

- If the correct resistance is not measured, the rotor winding is bad; replace the rotor.
- If the correct resistance is measured, the rotor winding is OK.

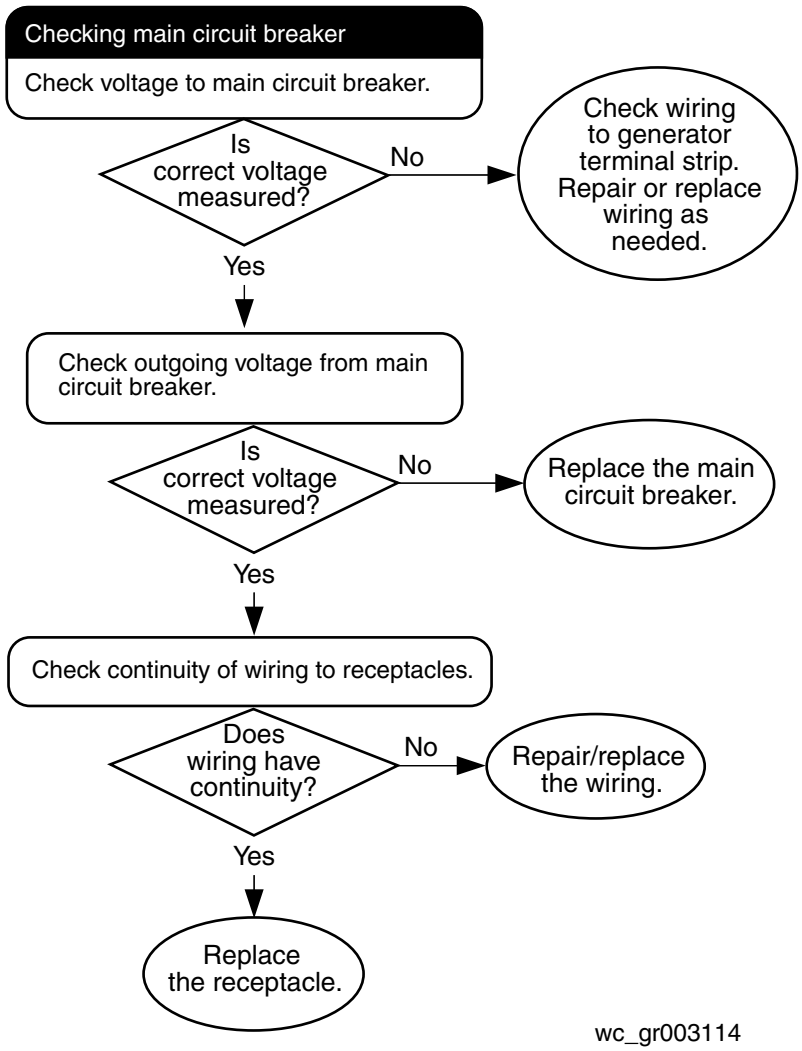
wc_gr006431

4.10.9 Check for shorts to the rotor shaft by measuring resistance between each slip ring and the end of the rotor shaft.

- If there is any resistance, the rotor winding has failed.
- If there is no resistance, the rotor winding is OK.

4.10.10 If possible, the resistance of the insulation should also be checked using a 500V megger or similar instrument. When using a megger, a resistance value of at least 1 megohm should be obtained. Measure between each winding group and the generator frame. If 1 megohm is not measured, dry out the windings in a warm atmosphere and recheck every 30 minutes until 1 megohm is obtained.

4.11 No Voltage at Receptacles—Flowchart 1C



4.12 Checking Main Circuit Breaker and Receptacle Circuitry

See Graphic: wc_gr004566

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

If there is no voltage measured at the receptacles but there is voltage at the generator terminal strip, you'll need to check the following: the wiring to the main circuit breaker, the main circuit breaker, and the wiring to the receptacles. To check the circuit, carry out the following procedures:

4.12.1 Remove the screws which secure the control panel to the frame and remove the control panel from the frame.

4.12.2 Start the generator.

4.12.3 Check the incoming voltage to the main circuit breaker **(a)** by measuring between each of the "Hot" terminals **(b)** (wires #102 and #5) and ground. On GP 2500A/GP 2600 models, measure between "Hot" terminals **(f)** and ground. There should be 120V±10%.

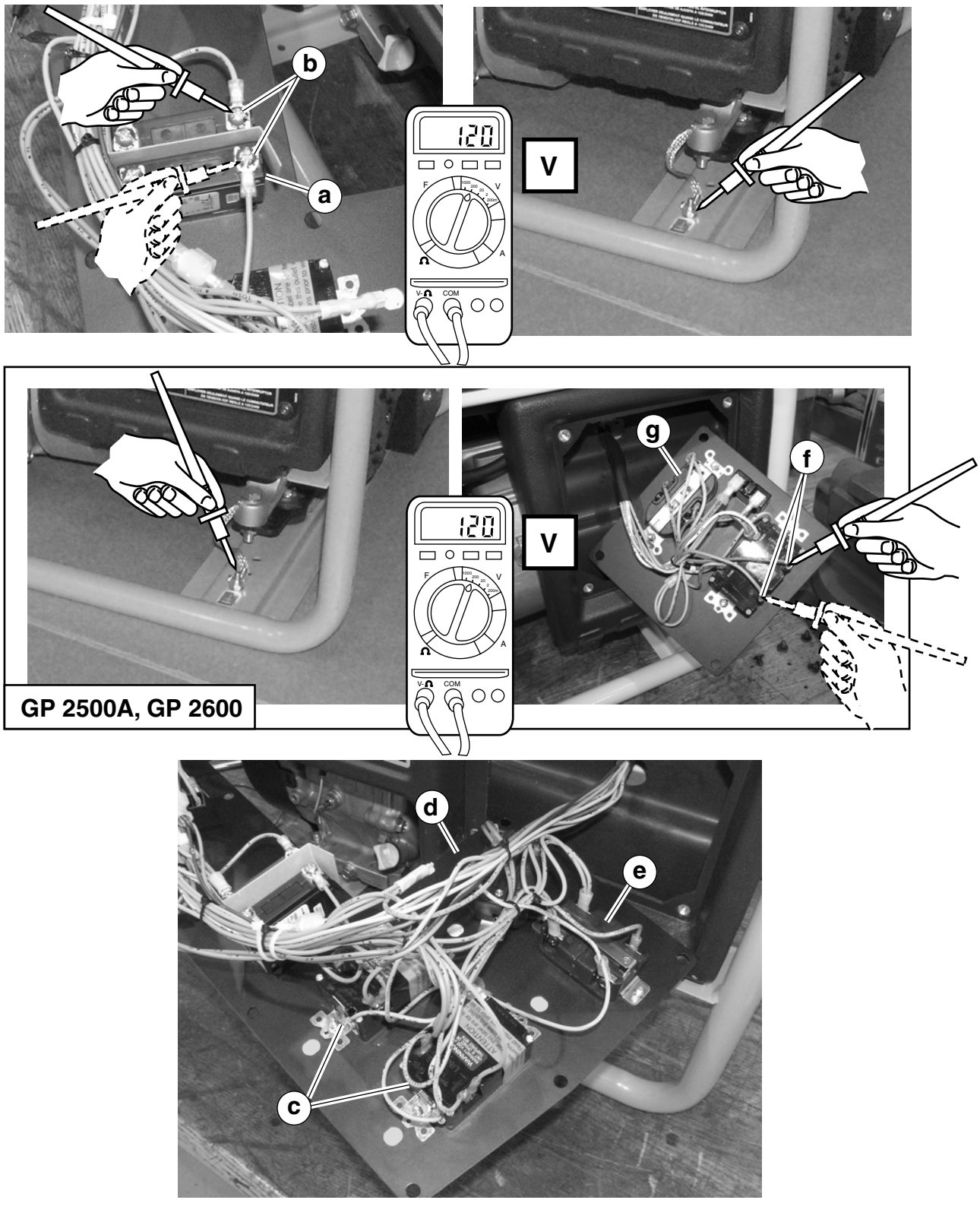
- If 120V±10% is not measured, stop the generator and check the continuity of wires #102 and #5. Repair or replace the wires as needed.
- If 120V±10% is measured, continue.

4.12.4 Place the main circuit breaker in the ON position and check the outgoing voltage from the main circuit breaker.

- If 120V±10% is not measured, stop the generator and replace the main circuit breaker.
- If 120V±10% is measured, continue.

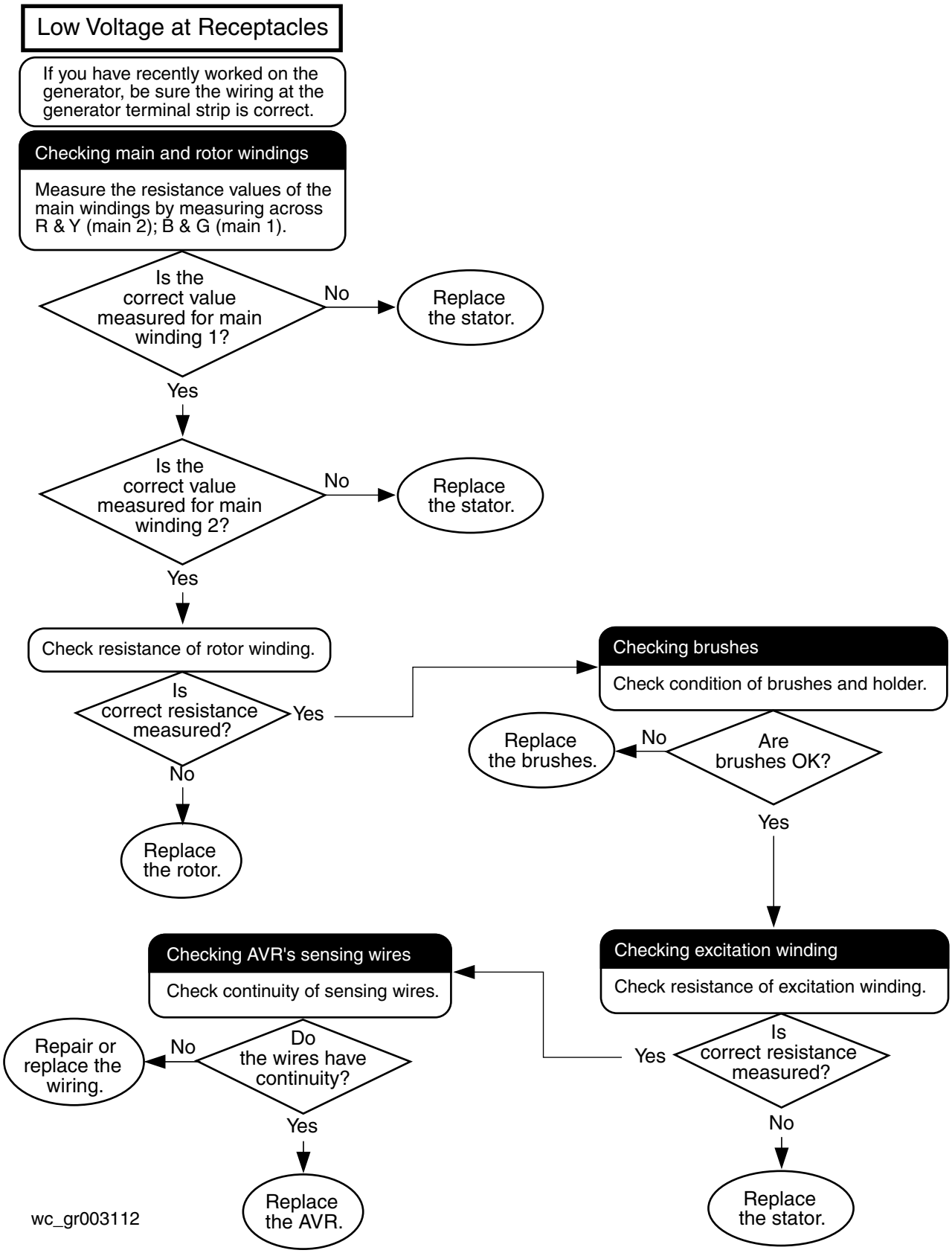
4.12.5 Check the continuity of the wiring to the receptacles **(c**, **d**, and **e**, or **g** on GP 2500A/GP 2600 models**)**.

- If the wiring has no continuity, repair or replace it.
- If the wiring has continuity, the receptacle is faulty. Replace the receptacle.



wc_gr004566

4.13 Low Voltage at Receptacles—Flowchart 2A


Low Voltage at Receptacles
If you have recently worked on the generator, be sure the wiring at the generator terminal strip is correct.
Checking main and rotor windings
Measure the resistance values of the main windings by measuring across R & Y (main 2); B & G (main 1).
Is the correct value measured for main winding 1?
No
Replace the stator.
Yes
Is the correct value measured for main winding 2?
No
Replace the stator.
Yes
Check resistance of rotor winding.
Is correct resistance measured?
Yes
No
Replace the rotor.
Checking brushes
Check condition of brushes and holder.
Are brushes OK?
No
Replace the brushes.
Yes
Checking excitation winding
Check resistance of excitation winding.
Is correct resistance measured?
Yes
No
Replace the stator.
Checking AVR's sensing wires
Check continuity of sensing wires.
Do the wires have continuity?
No
Repair or replace the wiring.
Yes
Replace the AVR.
wc_gr003112

4.14 Checking Brushes

See Graphic: wc_gr003126

As long as the brushes have continuity and are long enough to touch the slip rings, they should be functioning. To check the brushes, carry out the following procedures:

4.14.1 Stop the engine.

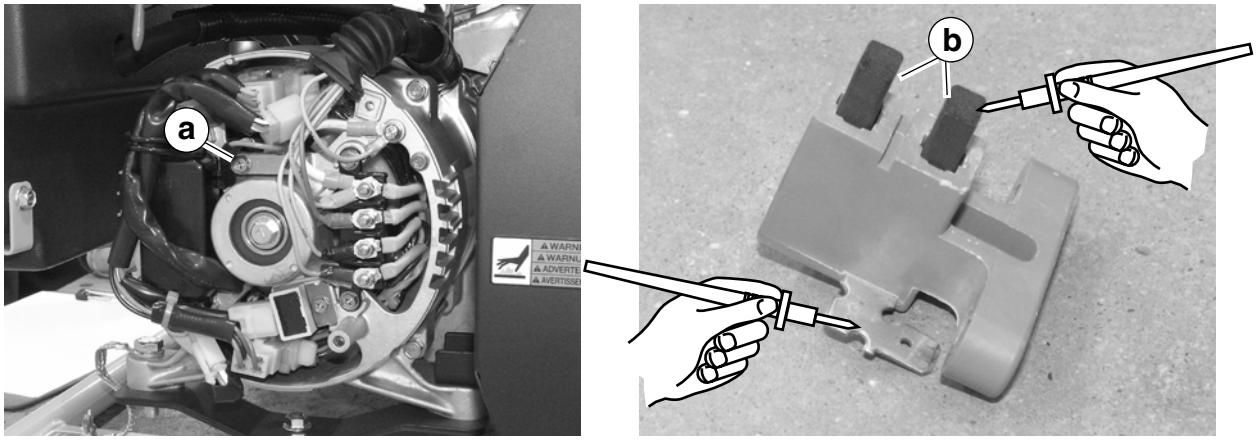
4.14.2 Remove the two screws that secure the end cover to the generator and remove the end cover.

4.14.3 Remove the screw **(a)** that secures the brush holder and remove the brush holder/brushes.

4.14.4 Visually inspect the brushes **(b)** for cracks and for the buildup of dirt. Clean the end of the brushes if necessary.

4.14.5 Check each brush for continuity.

4.14.6 Replace the brush holder/brushes as needed.



wc_gr003126

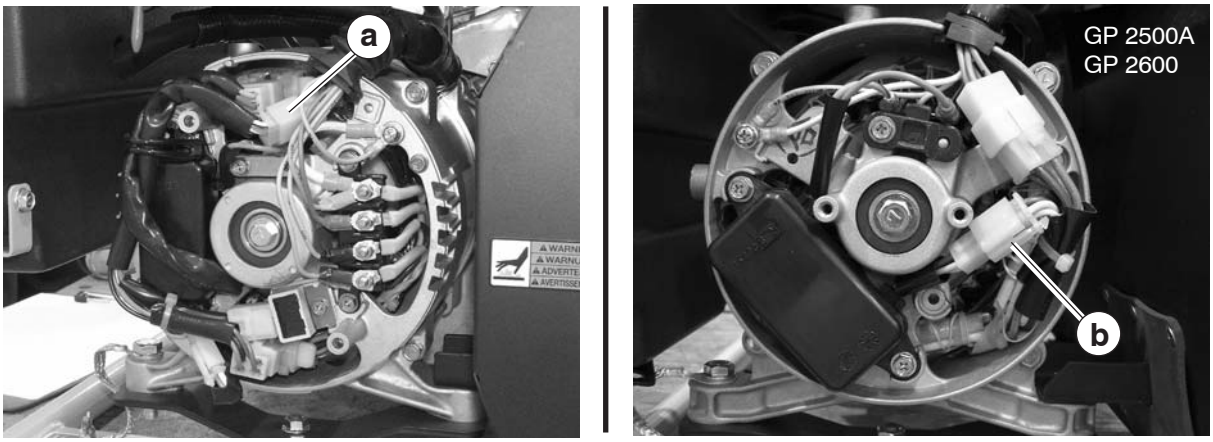
4.15 Checking Excitation Winding

The excitation winding provides AC voltage to the Automatic Voltage Regulator (AVR). The AVR then sends a DC voltage through the rotor winding “exciting” the rotor into becoming an electromagnet. To check the excitation winding, carry out the following procedures:

4.15.1 Stop the engine.

4.15.2 Remove the two screws which secure the end cover to the generator and remove the end cover.

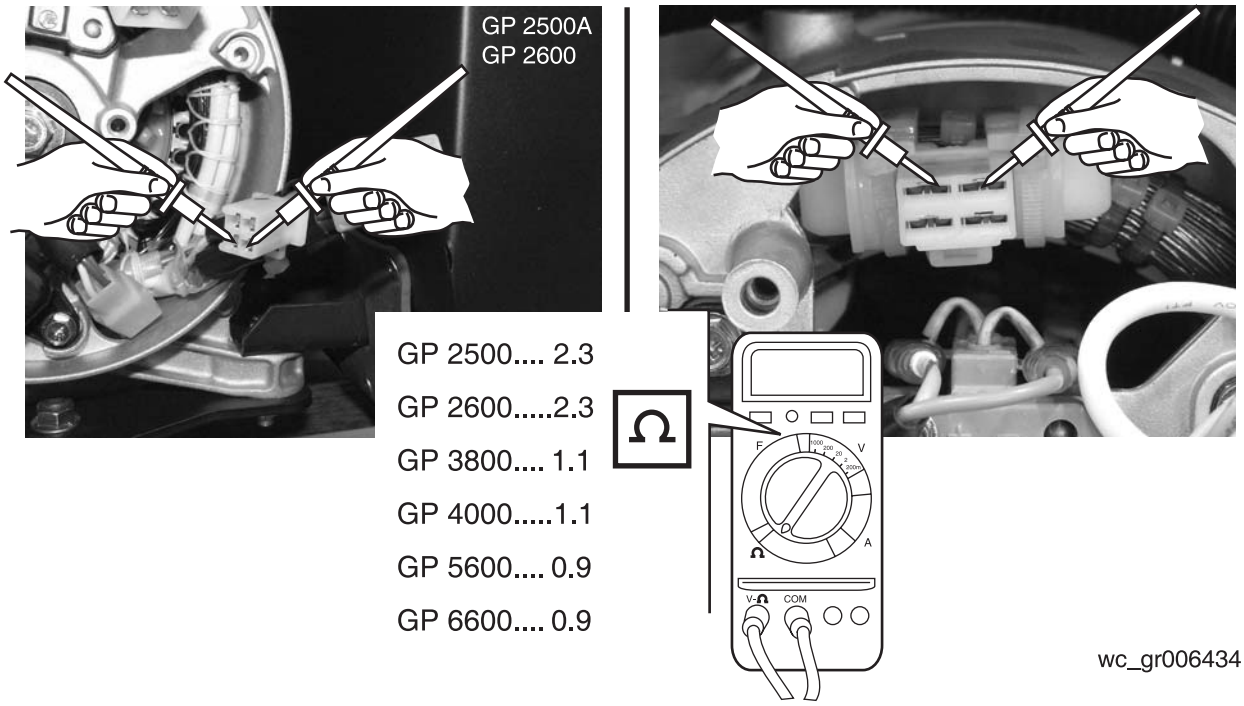
4.15.3 Remove the plug **(a)** which connects the excitation winding to with the AVR. On GP 2500A/GP 2600 models, remove plug **(b)**.



wc_gr006433

Continued

4.15.4 Using the Ohms scale on your multimeter, check the resistance of the excitation winding. Access the excitation winding via the connector where the two yellow wires of the plug connect to it. Each generator size will have a different value for the winding resistance. Check the chart in the graphic for the correct values—use a tolerance of +0.5/-0.0 Ohm.



- If the correct amount of resistance was not measured, replace the stator.
- If the correct amount of resistance was measured, continue.

4.15.5 Check the excitation winding for resistance to ground. (Measure resistance between the winding and the ground stud of the stator. Measure both sides of the winding.)

- If there is resistance to ground, the excitation winding has failed, replace the stator.
- If there is no resistance to ground, the excitation winding is OK.

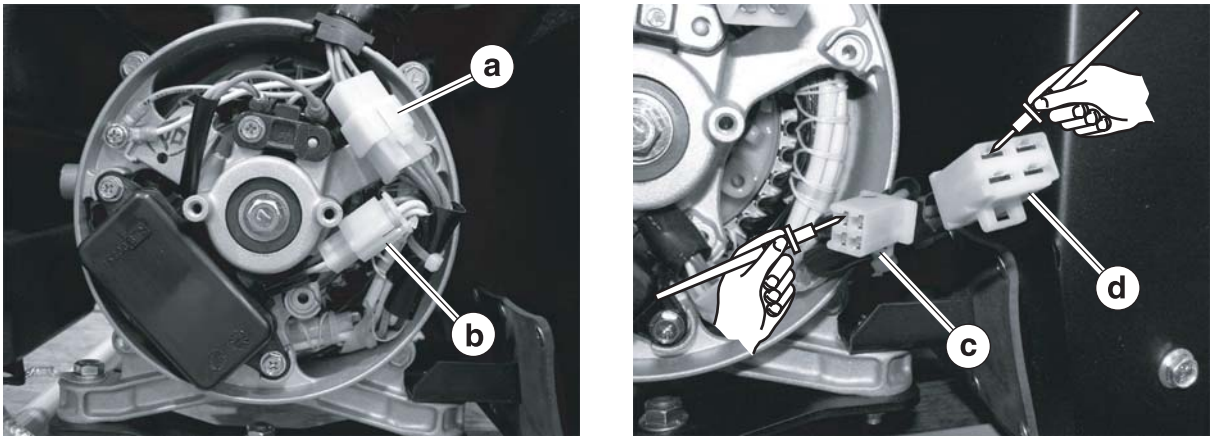
4.16 Checking AVR's Sensing Wires—GP 2500A, GP 2600

There are two sensing wires feeding the Automatic Voltage Regulator (AVR) both attached to main winding 2. If the sensing wires are shorted or broken, the AVR will not perform correctly. To check the continuity of the sensing wires, carry out the following procedures:

4.16.1 Stop the engine.

4.16.2 Remove the two screws which secure the end cover to the generator and remove the end cover.

4.16.3 Disconnect the generator plug **(a)**.



wc_gr006436

4.16.4 The two sensing wires are the brown and blue wires that share the same connector **(b)** as the wires for the DC winding; disconnect this connector.

4.16.5 Check each wire from the DC winding plug **(c)** with its counterpart in the generator plug **(d)**: blue to blue; brown to brown. In each case there should be continuity. Also check the wires from the DC winding plug to the generator plug, blue to brown; and brown to blue. In each case there should be continuity.

- If the wires lack continuity in any of the tests, the sensing wires have failed; replace the stator.
- If the wires have continuity in all cases, continue.

4.16.6 Check each wire from the DC winding plug to ground. (Measure between the winding and either the outer metal case of the generator or the ground stud on the frame.)

- If either wire has resistance to ground, it has failed.
- If both wires show no resistance to ground, they are OK.

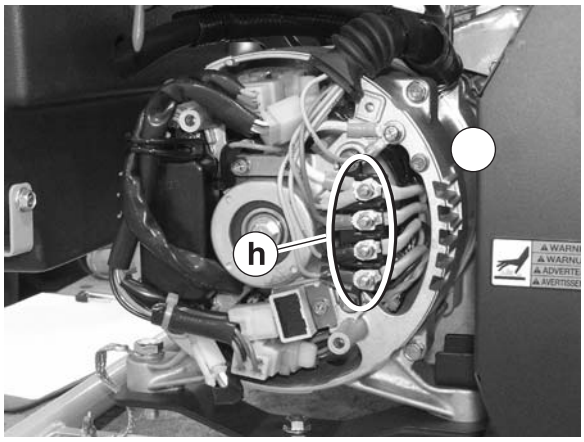
4.17 Checking AVR's Sensing Wires

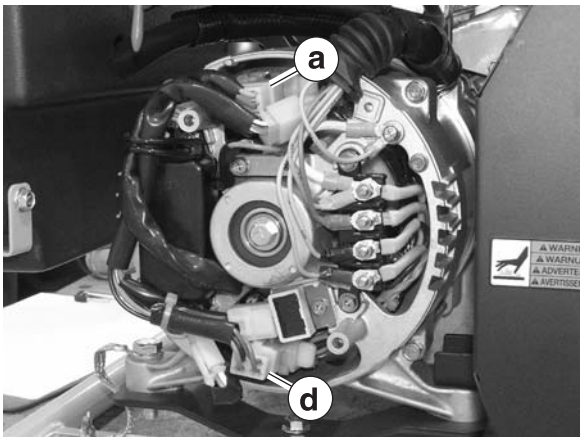
There are two sensing wires feeding the Automatic Voltage Regulator (AVR), one attached to each of the main windings. If the sensing wires are shorted or broken, the AVR will not perform correctly. To check the continuity of the sensing wires, carry out the following procedures:

4.17.1 Stop the engine.

4.17.2 Remove the two screws which secure the end cover to the generator and remove the end cover.

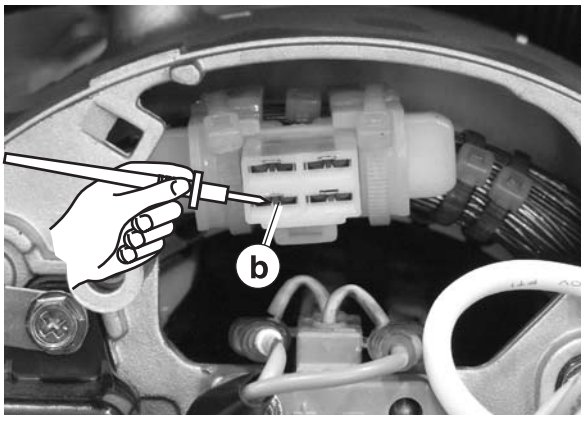
4.17.3 Disconnect the yellow-, red-, black-, and green-marked wires from the generator terminal strip **(h)**.

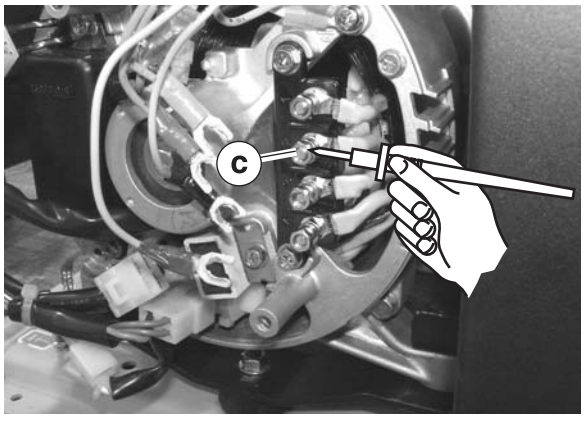




ghi_gr006438

4.17.4 The first sensing wire, represented by the brown wire on the electrical schematic, is internal to the stator. The AVR connects to this wire at the connection point at the upper portion of the stator. Access the wire by disconnecting the plug **(a)**.





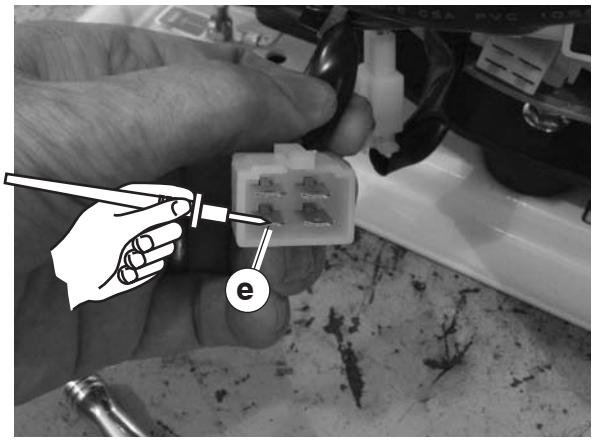
4.17.5 To check the first sensing wire, check for continuity between the connection point **(b)** where the brown wire from the AVR plug connects and main winding 2 at the terminal strip **(c)** where the red-marked wire usually connects. There should be continuity.

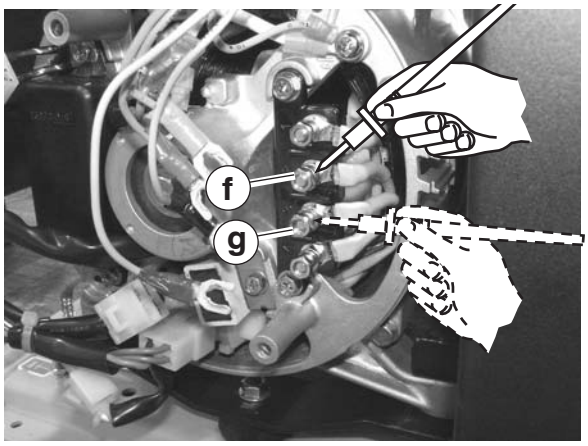
- If the first sensing wire does not have continuity, replace the stator.
- If the first sensing wire has continuity, continue.

4.17.6 Check the first sensing wire for a short to ground. (Measure resistance between the wire and the ground stud of the stator.)

- If the first sensing wire has resistance to ground, replace the stator.
- If the first sensing wire has no resistance to ground, continue.

4.17.7 The second sensing wire is really a circuit. It is represented by the blue wire and then the brown wire on the electrical schematic. This sensing circuit runs back through the Voltage Selector Switch (VSS) where the wiring splits, with one wire running to main winding 1, another to main winding 2. The circuit is accessed by disconnecting the plug **(d)** from the connection point at the lower end of the stator. To check the circuit, first check the main-winding-2 side. To do so, place the VSS in the 120V position. With one lead of your multimeter, probe the blue wire **(e)** of the plug. With the other lead, probe the generator terminal strip **(f)** where the red-marked wire is usually connected. There should be continuity.





wc_gr003128

Next, check the main-winding-1 side. To do so, place the VSS in the 120V/240V position. With one lead of your multimeter, probe the blue wire **(e)** of the plug. With the other lead, probe the generator terminal strip **(g)** where the black-marked wire is usually connected. There should be continuity.

- If the second sensing wire (circuit) does not have continuity, check the wiring through the various connectors and the VSS. Repair or replace components as needed.
- If the second sensing wire (circuit) has continuity, continue.

4.17.8 Check the blue wire for shorts to ground. (Measure resistance between the wire and the ground stud of the stator.)

- If the second sensing wire (circuit) has resistance to ground, check the wiring through the various connectors and the VSS. Repair or replace components as needed.
- If the second sensing wire (circuit) has no resistance to ground, the second sensing wire (circuit) is OK.

4.18 Confirming a Malfunctioning AVR

See Graphic: wc_gr003152

By removing the two sensing wires of the regulator and measuring the output voltage of the generator, you can determine if the generator windings and the AVR are functioning correctly. When the sensing wires are removed from the circuit, the generator should produce high voltage (greater than 150V, usually around 180V). If this high voltage is still produced with the AVR's sensing wires connected, the AVR is malfunctioning. To check the AVR, carry out the following procedures:

4.18.1 Stop the engine.

4.18.2 Place the auto idle switch in the OFF position.

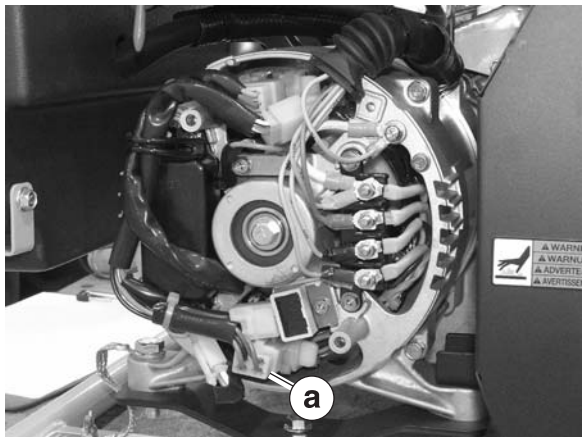
4.18.3 Remove the two screws which secure the end cover to the generator and remove the end cover.

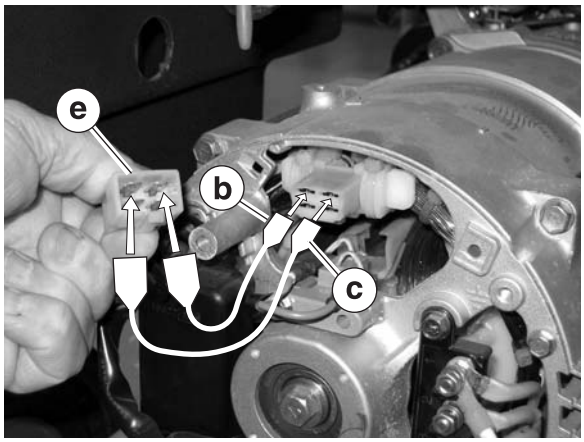
4.18.4 Disconnect plugs **(a** and **e)**.

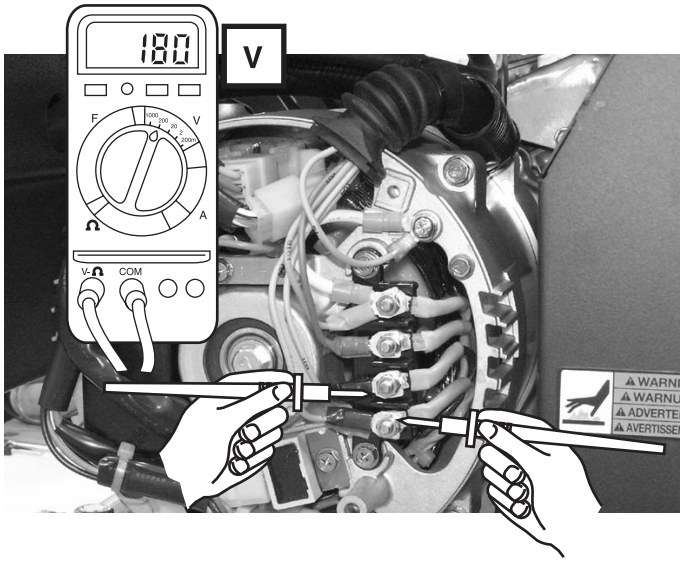
4.18.5 Create two short jumper wires **(b** and **c)** each with one male spade and one female spade. Connect the jumpers between the yellow wires of the plug **(e)** and where the yellow wires connect to the stator.
***NOTICE*:** Be sure to connect the jumper wires correctly. Damage to the generator may occur if the wires are incorrectly connected.

4.18.6 Start the engine and check the voltage at the terminal strip between the wire with the yellow marking and the wire with the red marking. There should be approximately 180V. Also check between the wire with the green marking and the wire with the black marking. There should be approximately 180V.

- If approximately 180V is not measured, the generator windings may be bad. See section *Checking Main and Rotor Windings.*
- If approximately 180V is measured, the generator windings are functioning properly, but the AVR is not. Replace the AVR.







wc_gr003152

4.19 Checking and Installing the Voltage Selector Switch (VSS)

See Graphic: wc_gr003134 and wc_gr003135

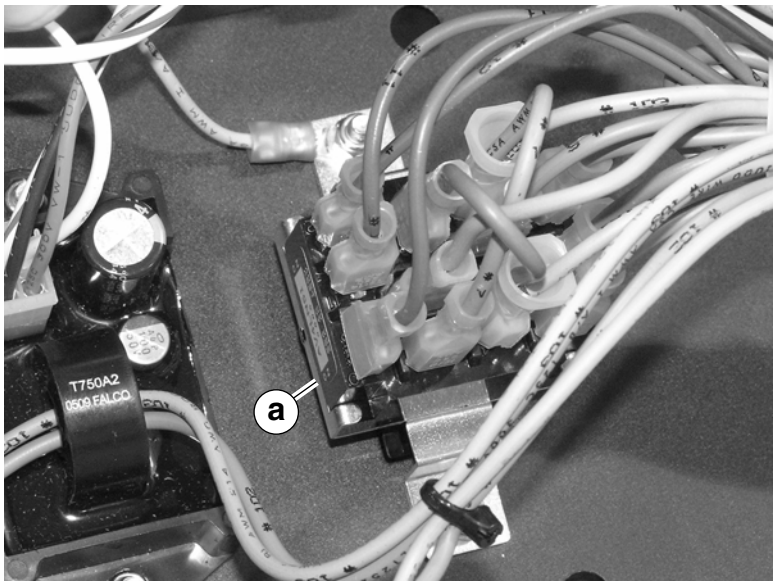
WARNING

Personal injury may occur while running the generator if the VSS is incorrectly wired. If the VSS has been worked on, be sure the VSS is correctly wired before running the generator.

***NOTICE*:** Damage to the generator will occur if the VSS is incorrectly wired.

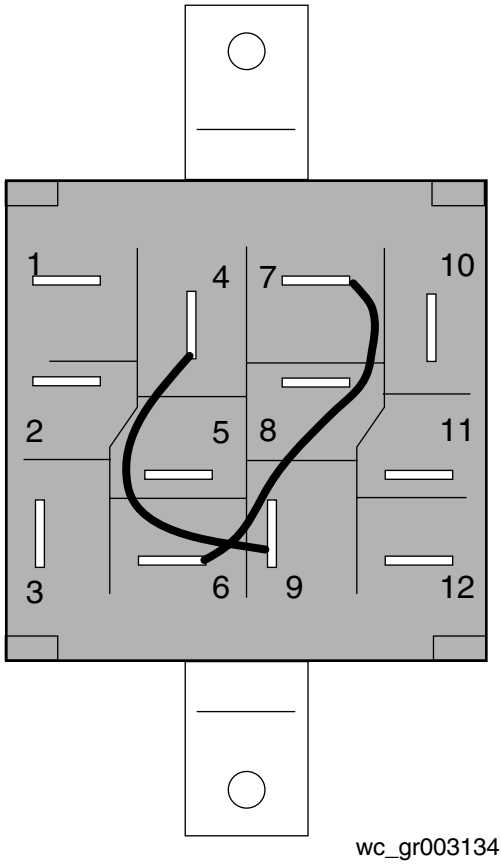
The VSS **(a)** selects the voltage mode setting of the generator. Changing the voltage mode also changes the orientation of the Automatic Voltage Regulator (AVR) sensing wires. Use the following information when testing and installing the VSS.

Position	Terminals with Continuity
120V/240V	1–2; 4–5; 7–8; 10–11
120V	2–3; 5–6; 8–9; 11–12



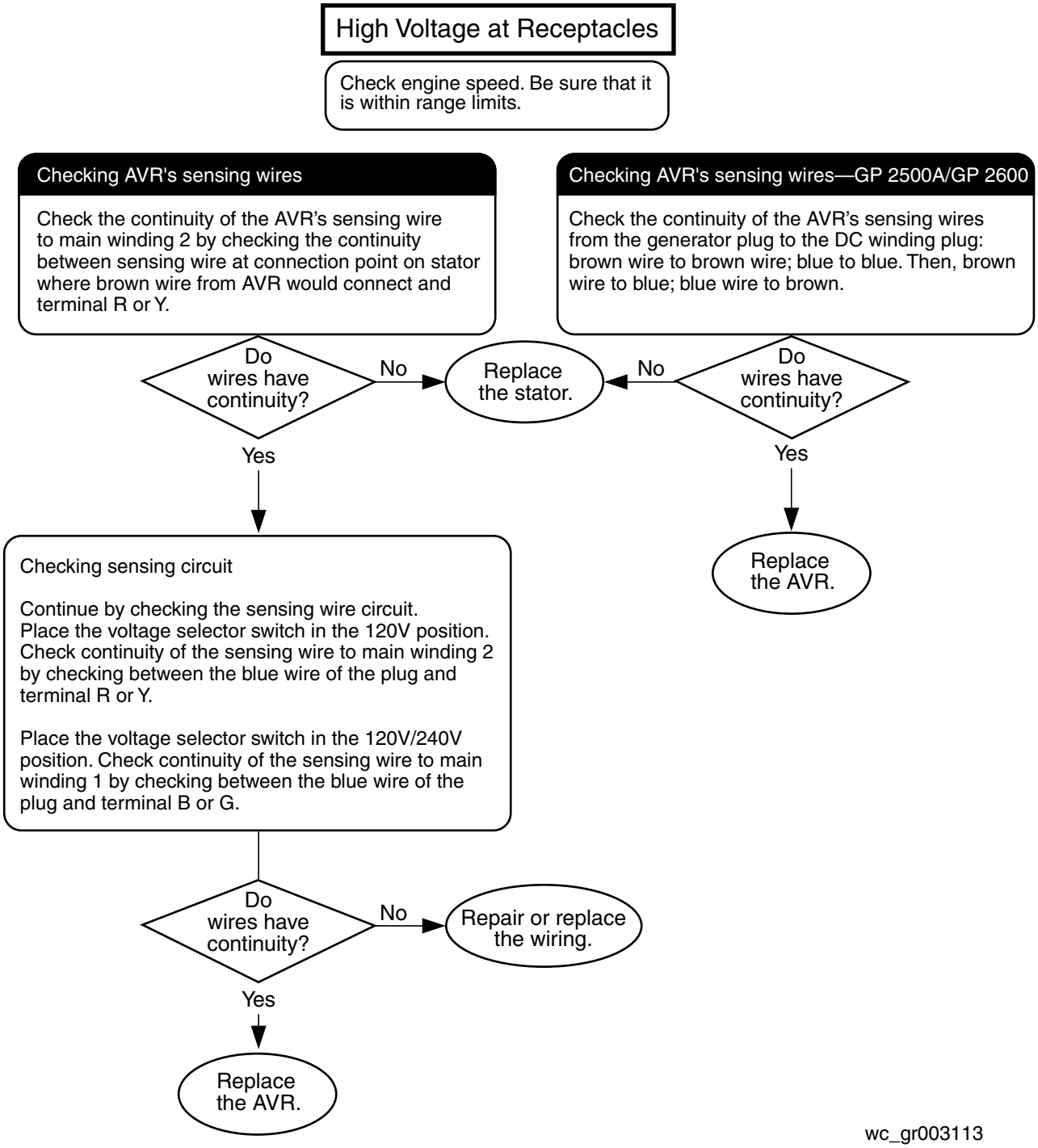
wc_gr003135

Terminal	Wire
1	Brown #1
2	Brown #2
3	Brown #3
4	Gray #104
5	Brown #5
6	Gray #103; jumper to terminal 7
7	Brown #7 jumper to terminal 6
8	Blue #8
9	Jumper to terminal 4
10	Brown #10
11	Brown #11
12	Brown #12



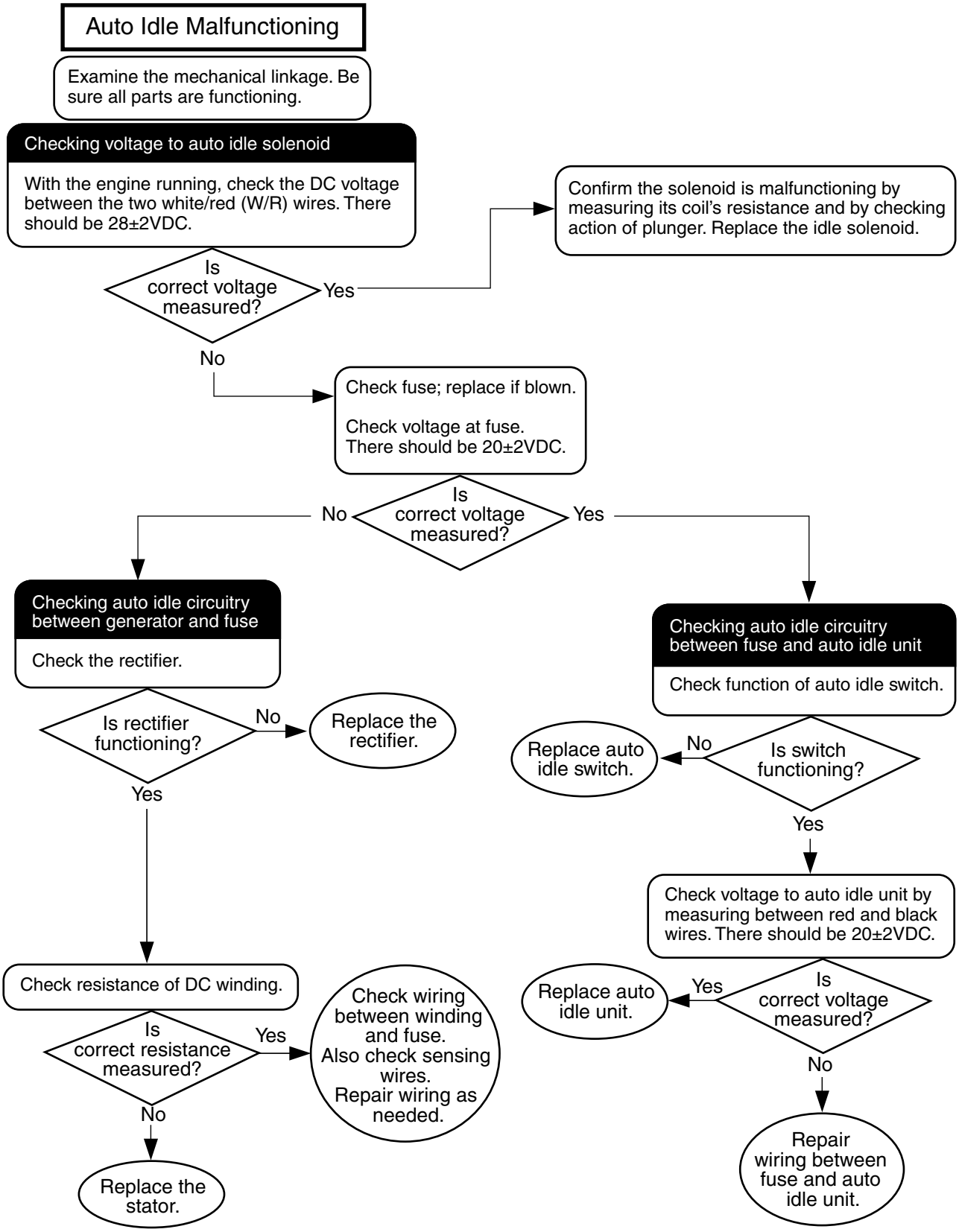
wc_gr003134

4.20 High Voltage Troubleshooting—Flowchart 3A


High Voltage at Receptacles
Check engine speed. Be sure that it is within range limits.
Checking AVR's sensing wires
Check the continuity of the AVR's sensing wire to main winding 2 by checking the continuity between sensing wire at connection point on stator where brown wire from AVR would connect and terminal R or Y.
Checking AVR's sensing wires—GP 2500A/GP 2600
Check the continuity of the AVR's sensing wires from the generator plug to the DC winding plug: brown wire to brown wire; blue to blue. Then, brown wire to blue; blue wire to brown.
Do wires have continuity?
No
Replace the stator.
No
Do wires have continuity?
Yes
Yes
Replace the AVR.
Checking sensing circuit
Continue by checking the sensing wire circuit. Place the voltage selector switch in the 120V position. Check continuity of the sensing wire to main winding 2 by checking between the blue wire of the plug and terminal R or Y.
Place the voltage selector switch in the 120V/240V position. Check continuity of the sensing wire to main winding 1 by checking between the blue wire of the plug and terminal B or G.
Do wires have continuity?
No
Repair or replace the wiring.
Yes
Replace the AVR.

wc_gr003113

4.21 Auto Idle Circuit Troubleshooting—Flowchart 4A


Auto Idle Malfunctioning
Examine the mechanical linkage. Be sure all parts are functioning.
Checking voltage to auto idle solenoid
With the engine running, check the DC voltage between the two white/red (W/R) wires. There should be 28±2VDC.
Is correct voltage measured?
Yes
Confirm the solenoid is malfunctioning by measuring its coil's resistance and by checking action of plunger. Replace the idle solenoid.
No
Check fuse; replace if blown.
Check voltage at fuse. There should be 20±2VDC.
Is correct voltage measured?
No
Yes
Checking auto idle circuitry between generator and fuse
Check the rectifier.
Is rectifier functioning?
No
Replace the rectifier.
Yes
Check resistance of DC winding.
Is correct resistance measured?
Yes
Check wiring between winding and fuse. Also check sensing wires. Repair wiring as needed.
No
Replace the stator.
Checking auto idle circuitry between fuse and auto idle unit
Check function of auto idle switch.
Is switch functioning?
No
Replace auto idle switch.
Yes
Check voltage to auto idle unit by measuring between red and black wires. There should be 20±2VDC.
Is correct voltage measured?
Yes
Replace auto idle unit.
No
Repair wiring between fuse and auto idle unit.

wc_gr003115

4.22 Checking Voltage to Auto Idle Solenoid

See Graphic: wc_gr004569

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

Problems with the auto idle system can be classified into one of two categories: electrical problems with power to the idle solenoid or problems with the mechanical linkage. Before checking the electrical system, check the governor mechanical linkage **(a)** to make sure it's functioning properly.

Electrical problems can be further broken down in to two categories: 1) power generation by the generator, 2) problems with the electrical circuit feeding power to the solenoid.

4.22.1 Start the generator.

4.22.2 Unplug the two white/red wires **(b)** from the idle solenoid. Measure the voltage between the two wires. There should be 28±2VDC.

- If 28±2VDC is measured, the idle solenoid is receiving the correct voltage. If the idle solenoid is receiving the correct voltage but is still not functioning, confirm that it is bad by measuring the resistance of the solenoid's coil. The coil should measure 26–33 Ohms (16–19 Ohms Wacker Engine). Replace the solenoid if the correct resistance is not measured.
- If 28±2VDC is not measured, continue.

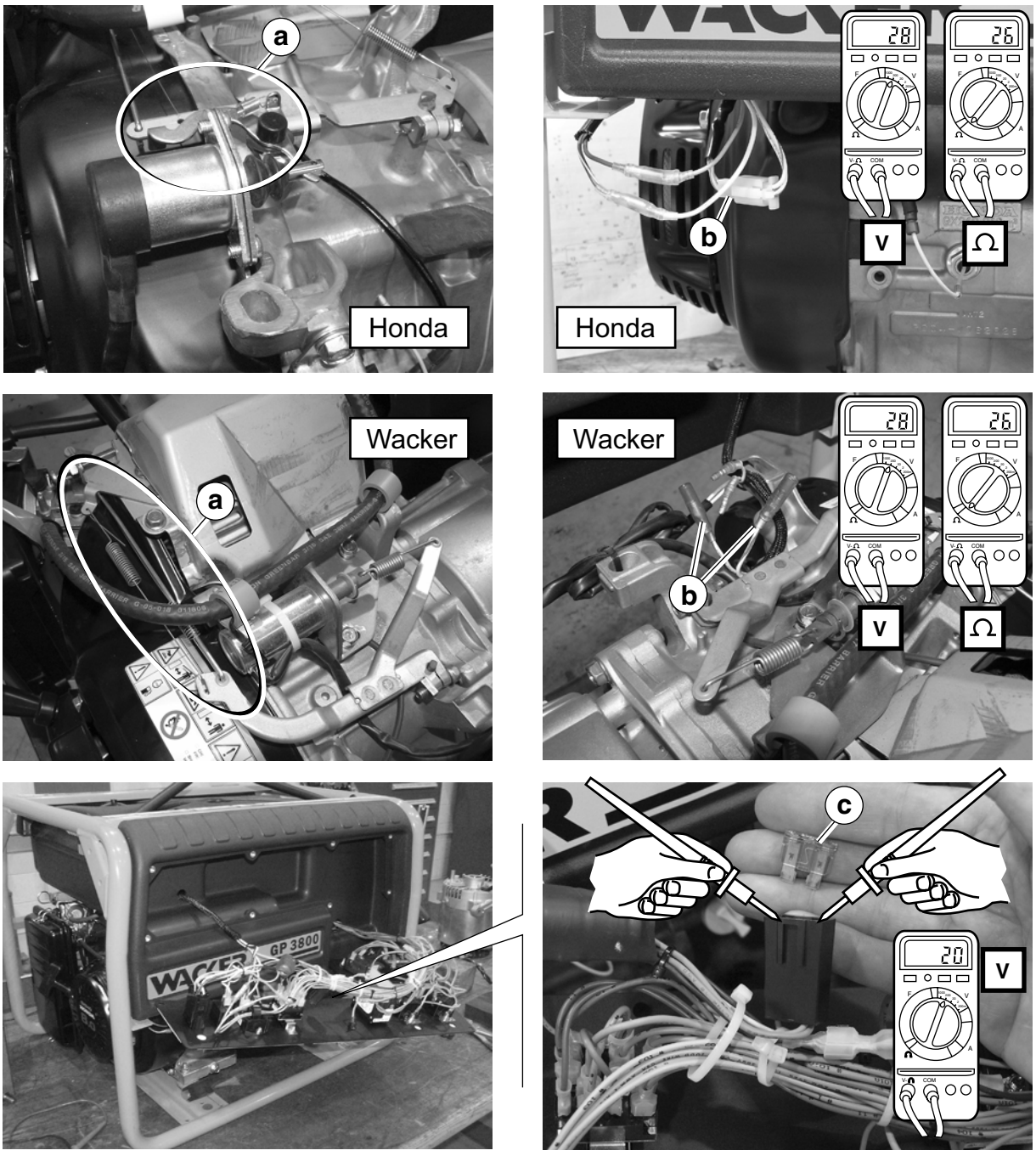
4.22.3 Stop the generator.

4.22.4 Remove the screws which secure the control panel to the enclosure.

4.22.5 Remove the 5A fuse **(c)**. Start the generator and check the voltage across the fuse holder. There should be 20–29 Volts.

- If 20–29 Volts is measured, the source of the problem is in the circuit from the fuse to the idle solenoid.
- If 20–29 Volts is not measured, the source of the problem is in the circuitry between the fuse and the DC winding.

4.22.6 Reinstall the 5A fuse (replace the fuse if it is blown).



wc_gr004569

4.23 Checking Auto Idle Circuitry Between Generator and Fuse

See Graphic: wc_gr004568

Voltage may be prevented from reaching the 5A fuse by a faulty rectifier or by a faulty DC winding. The auto idle circuit may also be malfunctioning due to faulty sensing wires. To check the circuit, carry out the following procedures:

4.23.1 Stop the generator.

4.23.2 Remove the two screws which secure the end cover to the generator and remove the end cover.

4.23.3 To check the rectifier **(a)**, remove the connector plug from the rectifier. Use the diode scale on your multimeter. Probe the top terminal with one lead and the bottom terminal with the other. Then, reverse the leads and conduct the test again. The rectifier should conduct in one direction and not the other. Check both upper terminals of the rectifier to the lower terminal of the rectifier in the same manner.

- If the rectifier is malfunctioning, replace it.
- If the rectifier is functioning, continue.

4.23.4 Remove the plug **(b)** from the stator.

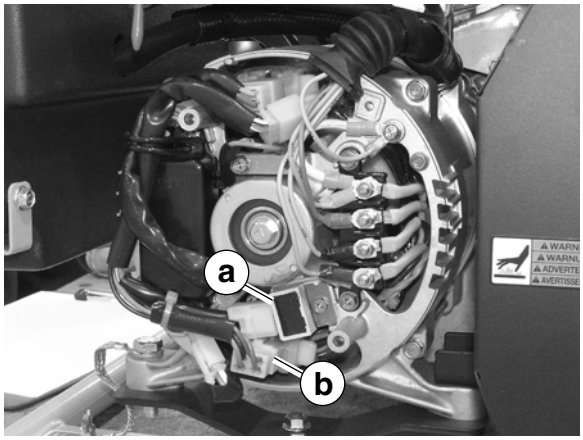
4.23.5 Using the Ohms scale on your multimeter, check the resistance of the DC winding. Each generator size will have a different value for the winding resistance. Check the chart in the graphic for the correct values—use a tolerance of +0.5/-0.0 Ohms.

- If the correct amount of resistance was not measured, replace the stator.
- If the correct amount of resistance was measured, the DC winding is OK; continue.

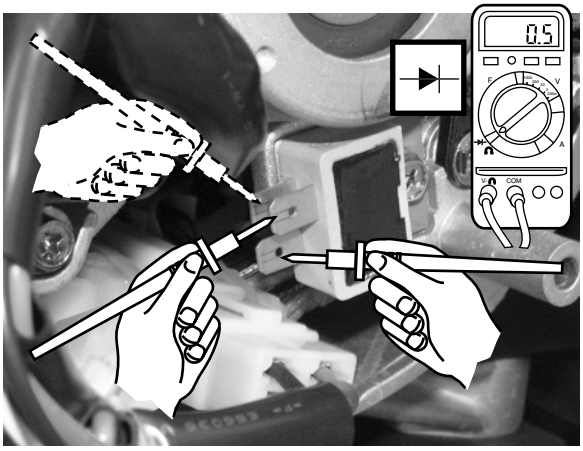
4.23.6 Remove the screws which secure the control panel to the generator.

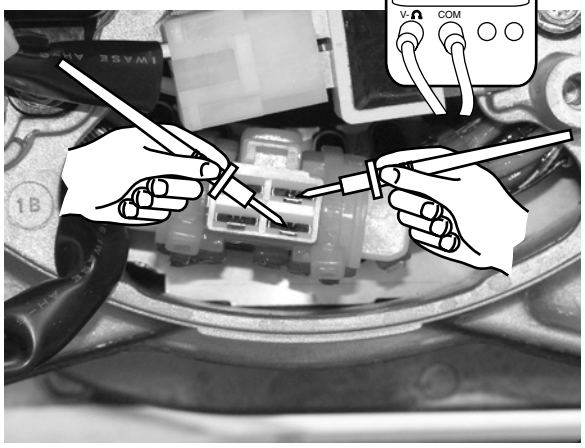
4.23.7 Check that the sensing wires are running through the ammeter **(c)** of the auto idle unit.

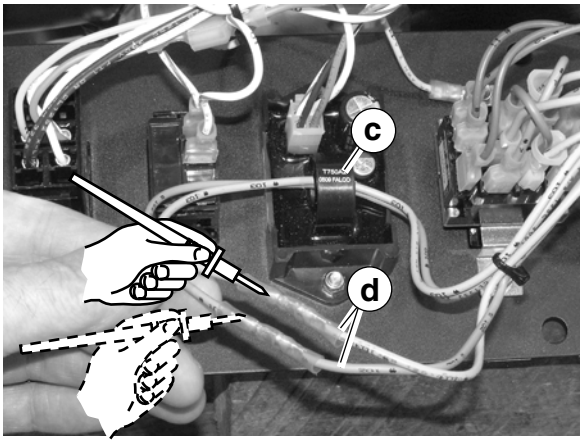
4.23.8 Check the continuity of the sensing wires **(d)** from the auto idle unit through to the generator terminal strip **(e)**.

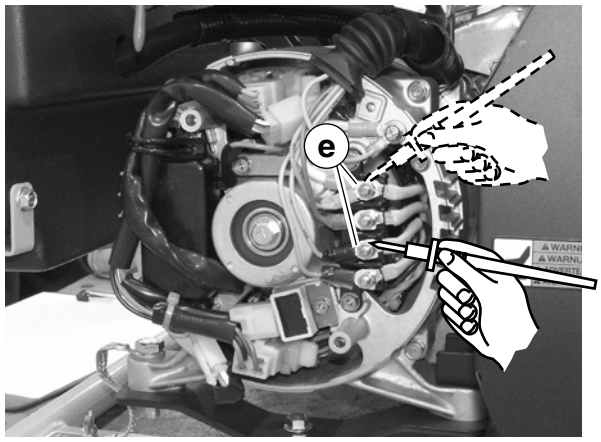


GP 2500.... ---
GP 2600.... ---
GP 3800.... 0.6
GP 4000.... 0.6
GP 5600.... 0.5
GP 6600.... 0.5









wc_gr004568

4.24 Checking Auto Idle Circuitry Between Fuse and Auto Idle Unit

See Graphic: wc_gr004570

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

Voltage may be prevented from reaching the idle solenoid by a faulty auto idle switch or by a faulty auto idle unit. To check the circuit, carry out the following procedure:

4.24.1 Stop the generator.

4.24.2 Remove the screws which secure the control panel to the generator. Locate the auto idle switch **(a)**.

4.24.3 Check the continuity of the auto idle switch.

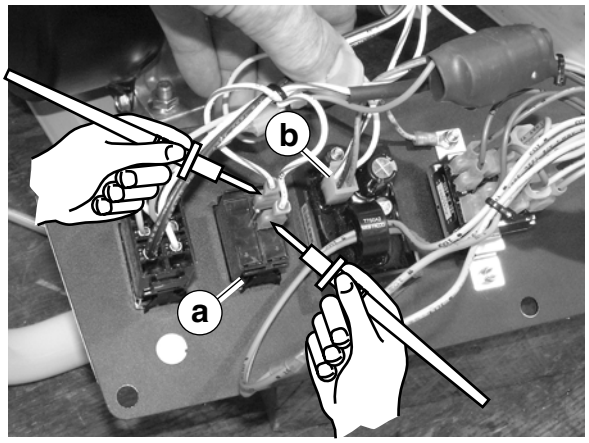
- If the switch lacks continuity, replace it.
- If the switch has continuity, it should be functioning.

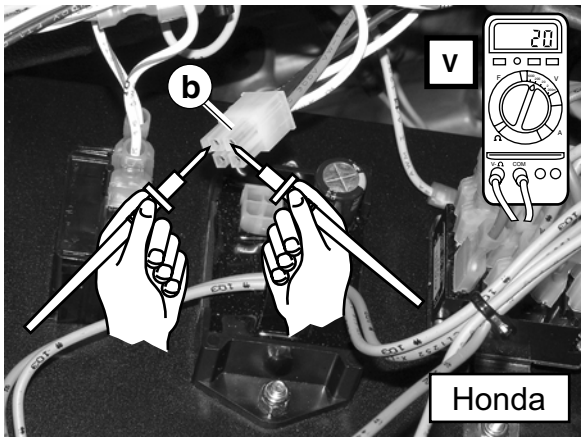
4.24.4 Remove the plug from the back of the auto idle unit **(b)**.

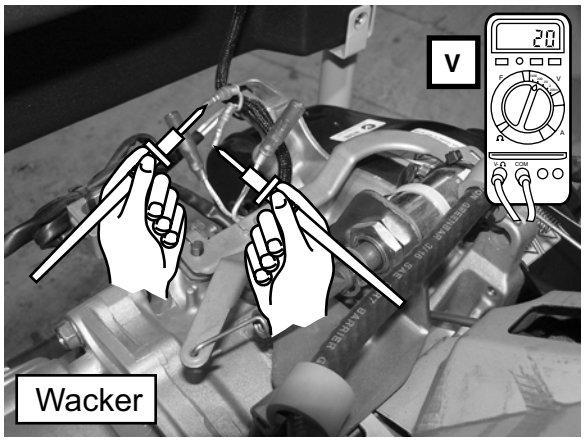
4.24.5 Start the generator.

4.24.6 Check the voltage between the red and black wires of the plug. There should be 20–29V. At this point in the troubleshooting, you should have measured voltage at the fuse but not at the idle solenoid, and the auto idle switch should have checked OK. Therefore:

- If voltage is measured to the auto idle unit but not at the idle solenoid, the auto idle unit is malfunctioning, replace it.
- If no voltage is measured at the auto idle unit, check the wiring between the fuse and the auto idle unit. Repair or replace the wiring as needed.

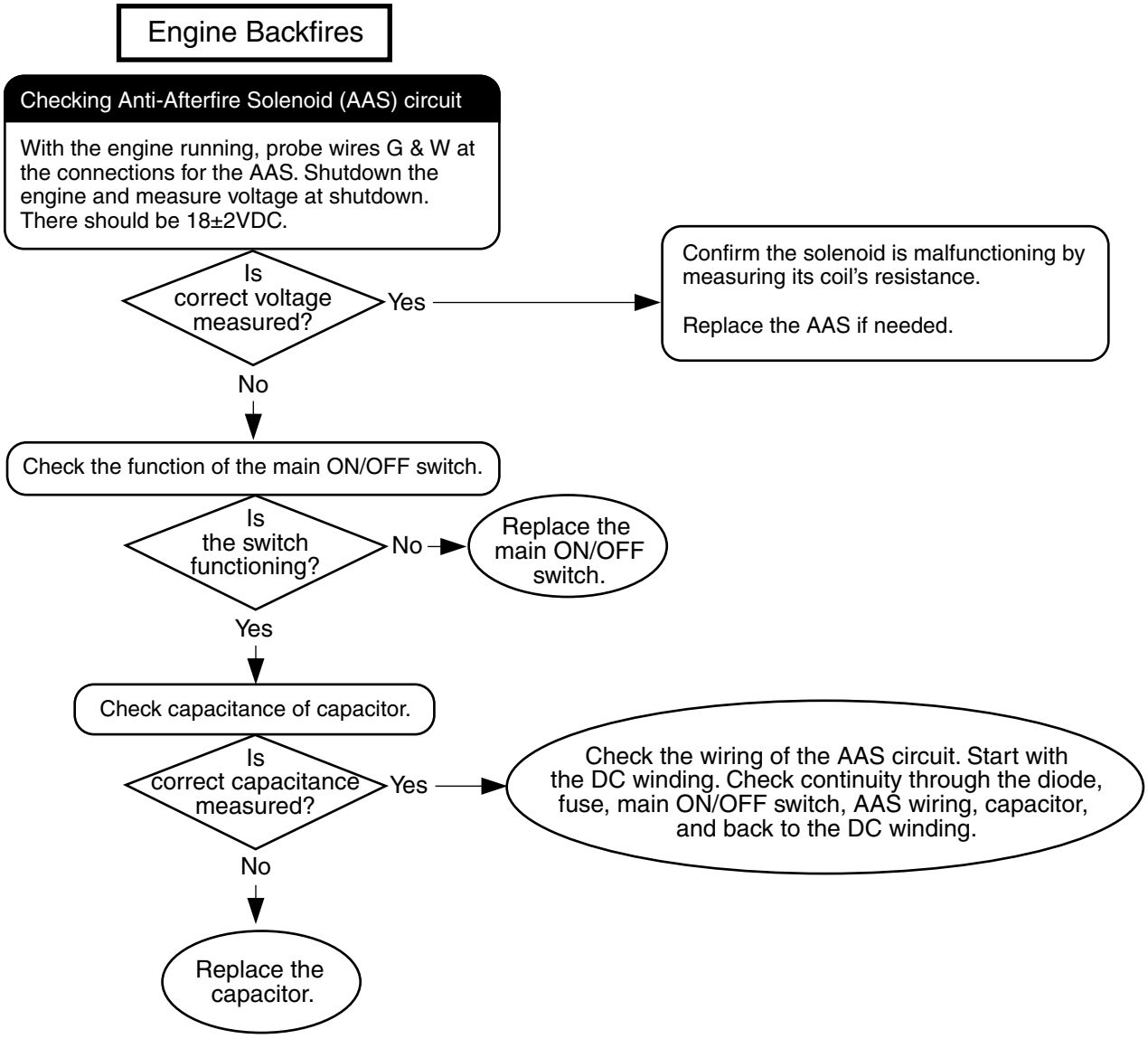






wc_gr004570

4.25 Engine Backfires—Troubleshooting Flowchart 5A


Engine Backfires
Checking Anti-Afterfire Solenoid (AAS) circuit
With the engine running, probe wires G & W at the connections for the AAS. Shutdown the engine and measure voltage at shutdown. There should be 18±2VDC.
Is correct voltage measured?
Yes
Confirm the solenoid is malfunctioning by measuring its coil's resistance.
Replace the AAS if needed.
No
Check the function of the main ON/OFF switch.
Is the switch functioning?
No
Replace the main ON/OFF switch.
Yes
Check capacitance of capacitor.
Is correct capacitance measured?
Yes
Check the wiring of the AAS circuit. Start with the DC winding. Check continuity through the diode, fuse, main ON/OFF switch, AAS wiring, capacitor, and back to the DC winding.
No
Replace the capacitor.

wc_gr003116

Notes

4.26 Checking Anti-Afterfire Solenoid (AAS) Circuit—Honda Engine

See Graphic: wc_gr003133

WARNING

Electric shock hazard. Only qualified personnel should conduct this test.

The AAS is located on the engine underneath the carburetor bowl. Voltage may be prevented from reaching the AAS by: a faulty DC winding, a blown fuse, a faulty engine ON/OFF switch, or a faulty capacitor. To check the circuit, carry out the following procedure:

4.26.1 Check the 5A fuse. See section *Checking Voltage to Auto Idle Solenoid.*

4.26.2 Check the resistance of the DC winding. See section *Checking Auto Idle Circuitry Between Generator and Fuse.*

4.26.3 Check for voltage at the AAS by starting the generator, probing the green and white wires **(a)** with your multimeter leads, then shutting the engine off and measuring the voltage on the multimeter at shutdown. There should be 18±2V.

- If the correct voltage was measured, the AAS is malfunctioning; replace it.
- If the correct voltage was not measured, continue.

4.26.4 Remove the screws that secure the control panel to the generator.

4.26.5 Check the continuity of the main ON/OFF switch. In the OFF position it should have continuity across contacts 5 and 6—that is, between wires W/R **(b)** and W **(c)**.

- If the main ON/OFF switch has no continuity, replace it.
- If the main ON/OFF switch has continuity, continue.

4.26.6 Disconnect the capacitor **(d)**.

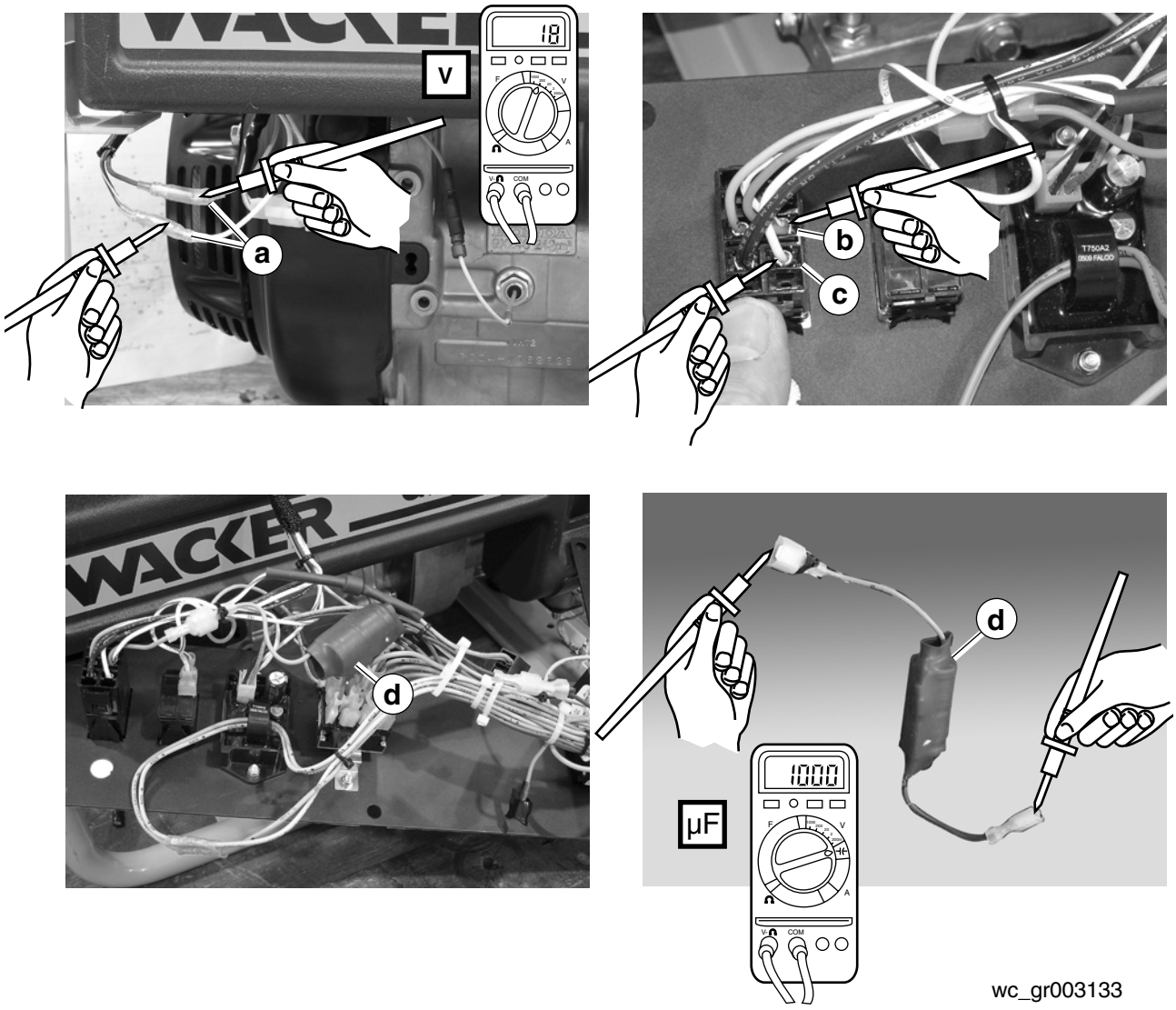
CAUTION

A functioning capacitor can hold up to 30VDC; use care when discharging it.

Discharge the capacitor by placing an insulated screw driver or like tool across both of its leads. Then, check the capacitor's capacitance. It is rated at 1000 µF (microfarads) and should measure within 10% of that rating.

- If the correct capacitance is not measured, replace the capacitor.
- If the correct capacitance is measured, the capacitor is OK.

4.26.7 All major components of the circuit have now been checked. If the AAS is still not working, check the continuity of all the wires in the circuit. Repair or replace the wires as needed.


V
a
b
c
d
d
µF
1000
wc_gr003133

4.27 Diagnosing GFI Tripping

See Graphic: wc_gr003570

A common cause for nuisance tripping of the GFI is incorrect wiring. If you experience tripping of the GFI when changing from the 120V mode to the 240V mode, check the wiring running through the GFI. There should be four brown wires and two blue wires running through the ammeter portion **(a)** of the GFI. If you have any other combination, refer to the wiring schematic and correct the situation.

If you're not sure whether tripping of the main circuit breaker is due to the GFI or due to the main circuit breaker, carry out the following test:

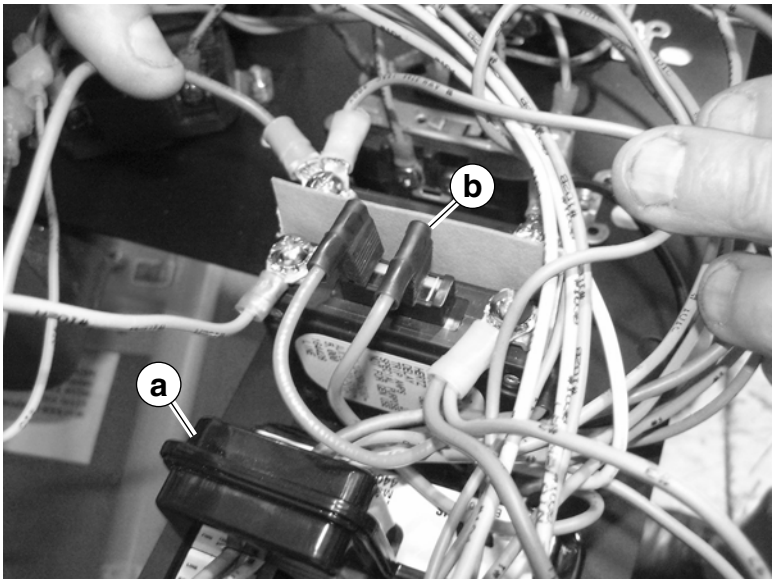
4.27.1 Turn off the generator.

4.27.2 Disconnect yellow wire **(b)** from the shunt of the main circuit breaker.

4.27.3 Place the main circuit breaker in the 120V mode position.

4.27.4 Start the generator and switch the main circuit breaker from the 120V position to the 240V position.

- If the GFI trips and its red light is on, the problem lies within the GFI. Check the wiring through the ammeter portion of the GFI. If the wiring is correct, replace the GFI.
- If the GFI does not trip, the problem lies in the main circuit breaker. Replace the main circuit breaker.



wc_gr003570

5 Disassembly/Assembly Procedures

5.1 Tools

Because all possible problems encountered while repairing the machine cannot be anticipated, it is up to the mechanic to use common sense and good judgement in tool selection.

The use of any special tools is recommended only for those operations where the use of conventional tools proves inadequate.

Before substituting another tool or procedure, you should be satisfied that neither personal injury nor damage to the component will result.

5.2 Ordering Parts

The repair procedures contained in this manual do not include part numbers. For parts replacement information, refer to the Parts Book originally supplied with the machine.

If the original Parts Book has been lost, a replacement may be ordered from Wacker Neuson Corporation. When ordering a replacement Parts Book, please list the model number, item number, revision level, and serial number of the machine. Parts Books are also available on the Wacker Neuson Corporation Web site. See www.wackerneuson.com. Enter the site as a visitor.

5.3 Reference Numbers ( )

Repair procedures contain reference numbers enclosed in parentheses ( ). These numbers refer to the item numbers shown on the assembly drawings and other detailed drawings. They are included to aid the mechanic in identifying parts and assembling components.

5.4 Replacing the Muffler

See Graphic: wc_gr003136

Removal:

5.4.1 Disconnect the spark plug.

5.4.2 Remove the screw **(a)** that secures the muffler guard and the generator mounting leg **(b)** to the shock mount bracket.

5.4.3 Remove the screws **(c)** that secure the muffler guard to the frame.

5.4.4 Remove the six screws **(d)** that secure the muffler guard halves together and remove the outer muffler guard **(e)**.

Note: *For clarity, the engine and muffler are shown removed from the generator frame.*

5.4.5 Remove the two nuts **(f)** that secure the muffler to the engine and remove the muffler and the inner muffler guard **(g)** from the engine.

Installation:

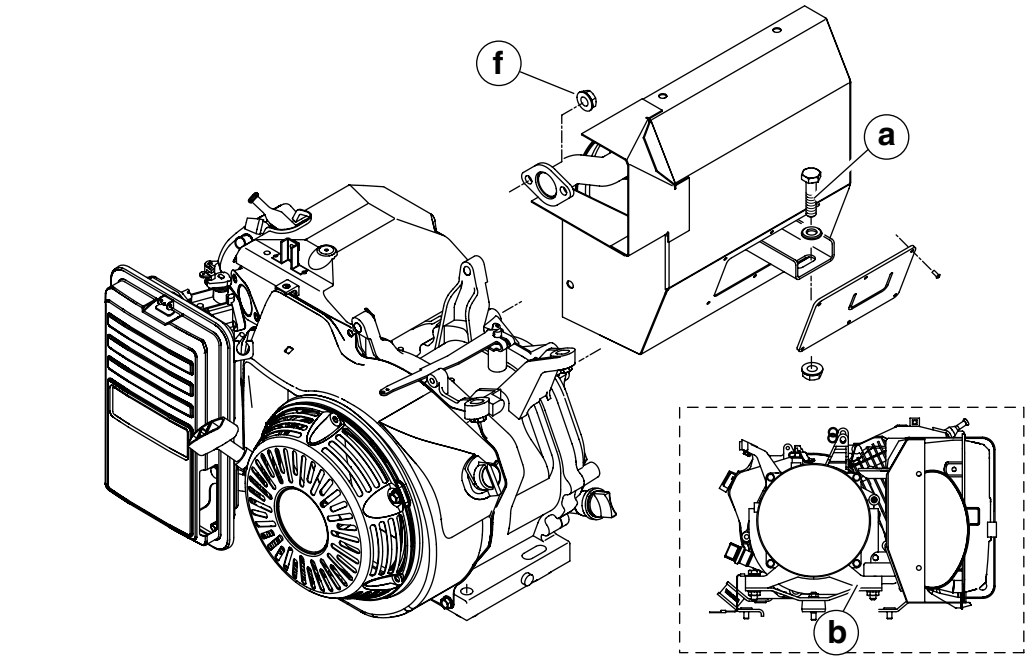
5.4.6 When installing the muffler, the inner muffler guard **(g)** will need to be positioned before installing the two nuts that secure the muffler to the engine. To do so, slide the inner muffler guard over the muffler. Position the inner guard so that the muffler is able to mate with the gasket and engine exhaust manifold. Then, using two nuts **(f)**, secure the muffler and the inner muffler guard to the engine.

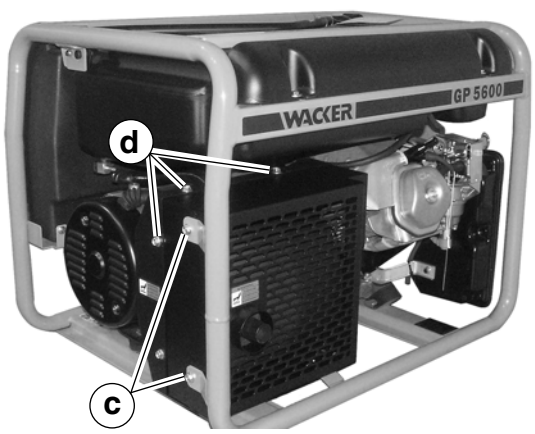
5.4.7 Secure the outer muffler guard **(e)** to the inner muffler guard with six screws **(d)**.

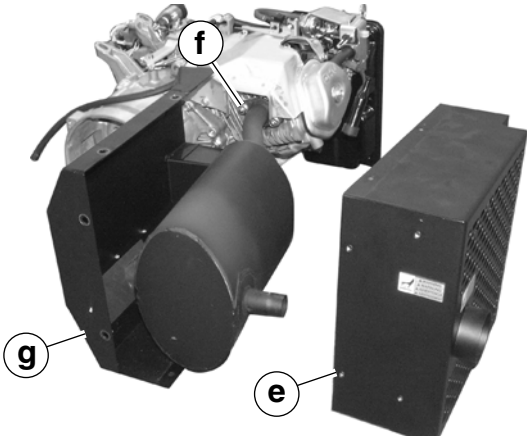
5.4.8 Install the screws **(c)** that secure the muffler guard to the frame.

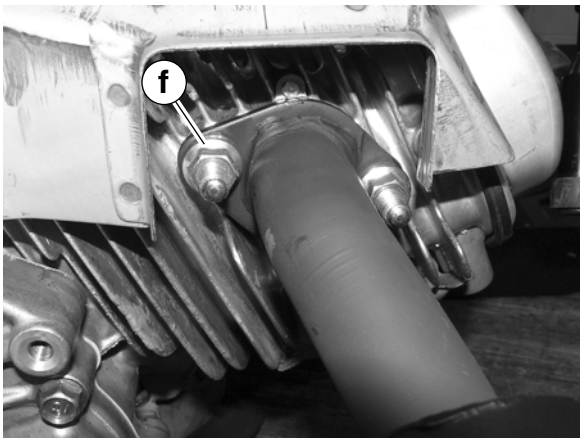
5.4.9 Secure the muffler guard and the generator mounting leg to the shock mount bracket using screw **(a)** and nut.

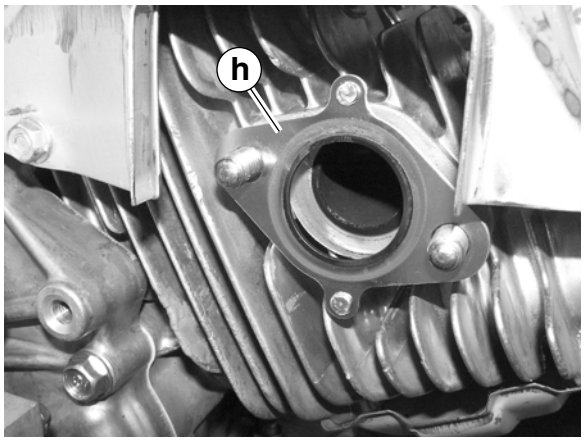
5.4.10 Reconnect the spark plug.











wc_gr003136

5.5 Replacing the Fuel Tank

See Graphic: wc_gr003137

Removal:

5.5.1 Disconnect the spark plug.

5.5.2 Turn the fuel valve **(a)** off. Remove the fuel hose **(b)** at the fuel valve; plug the fuel hose as soon as it is free from the fuel valve.

5.5.3 Remove the shoulder bolts **(c)** and hardware that secure the lifting handle **(d)** to the frame and remove the lifting handle.

5.5.4 Remove the two nuts **(e)** that secure the retaining bracket **(f)** to the frame and remove the retaining bracket.

5.5.5 Remove the four screws **(g)** that secure the tank **(h)** to the frame and lift the tank up and out of the frame.

Installation:

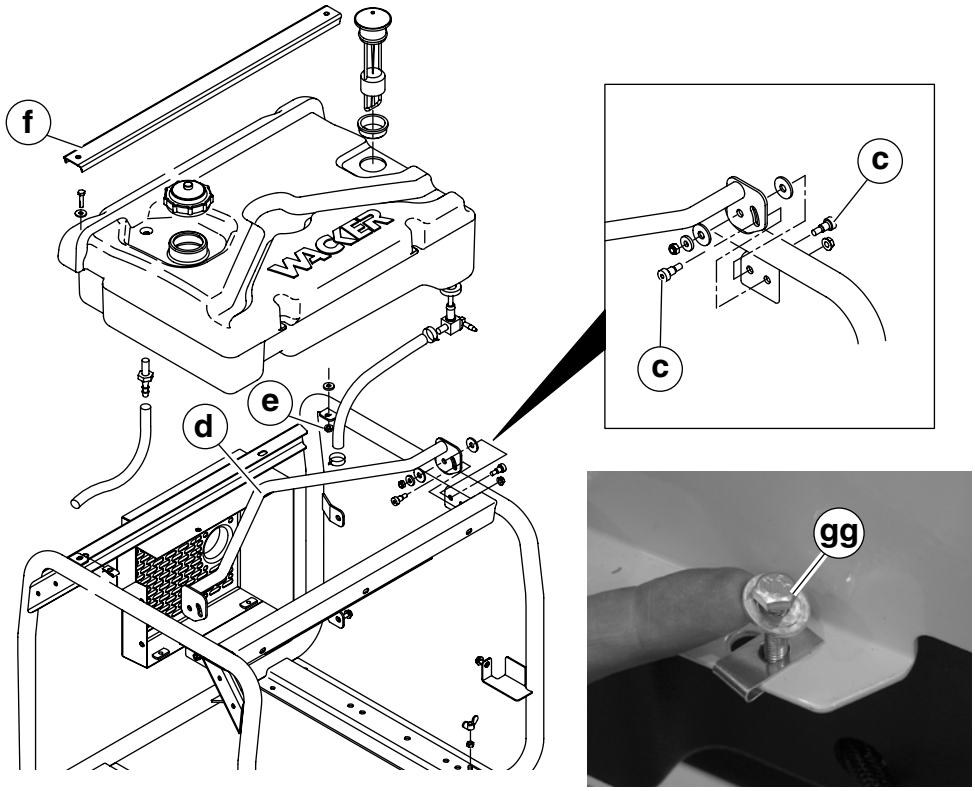
5.5.6 When installing the fuel tank **(h)**, screw in slightly the two screws **(gg)**, located near the control panel, used to secure the fuel tank. Tape the washer in the raised position to the screw. Then, slide the fuel tank underneath the washer. Tighten all the screws securing the fuel tank to the frame.

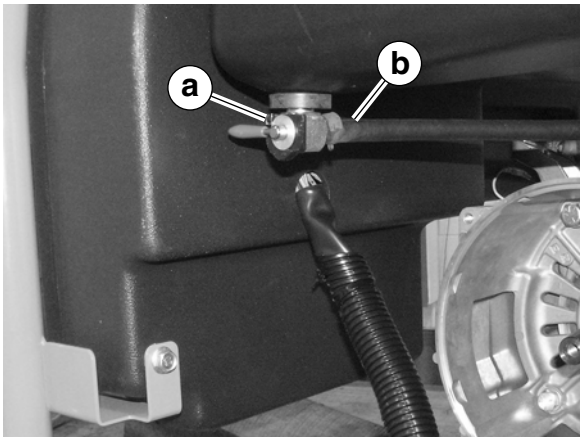
5.5.7 Secure the retaining bracket **(f)** with two nuts **(e)**.

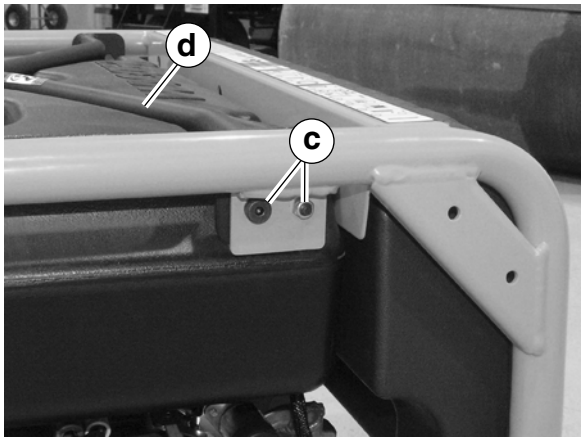
5.5.8 Position the bushing, spacer, and washer as shown and secure the lifting handle **(d)** to the frame with the shoulder bolts **(c)**.

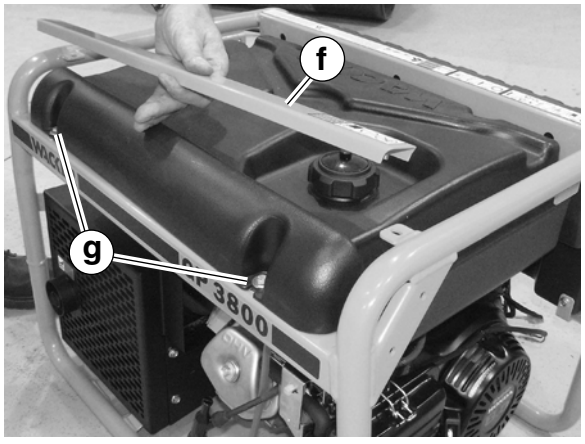
5.5.9 Reinstall the fuel hose **(b)**.

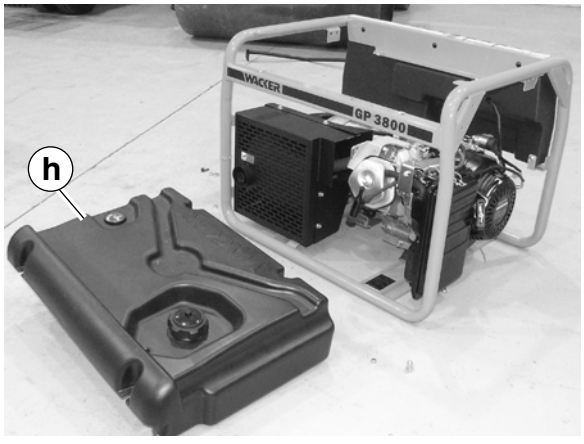
5.5.10 Reconnect the spark plug.











wc_gr003137

5.6 Replacing the Stator

See Graphic: wc_gr003138

Removal:

5.6.1 Disconnect the spark plug.

5.6.2 Remove the two screws **(a)** that secure the end cover and remove the end cover from the generator.

5.6.3 Disconnect the wires **(b)** from the terminal strip, the ground wire **(c)**, and the harness connector **(d)**. On GP 2500A/GP 2600 models, disconnect the generator plug.

5.6.4 Remove the screw **(e)** that secures the brush holder and remove the brush holder.

5.6.5 Remove the screw **(f)** that secures the ground strap and the generator mounting leg to the shock mount bracket. Also remove the screw **(g)** that secures the other generator mounting leg and the muffler to the shock mount bracket.

5.6.6 Remove the four long screws **(h)** that secure the stator cover to the engine and pull the stator **(i)** off the rotor.

Installation:

5.6.7 Position the stator **(i)** on the rotor and secure the stator to the rotor with four long screws **(h)**.

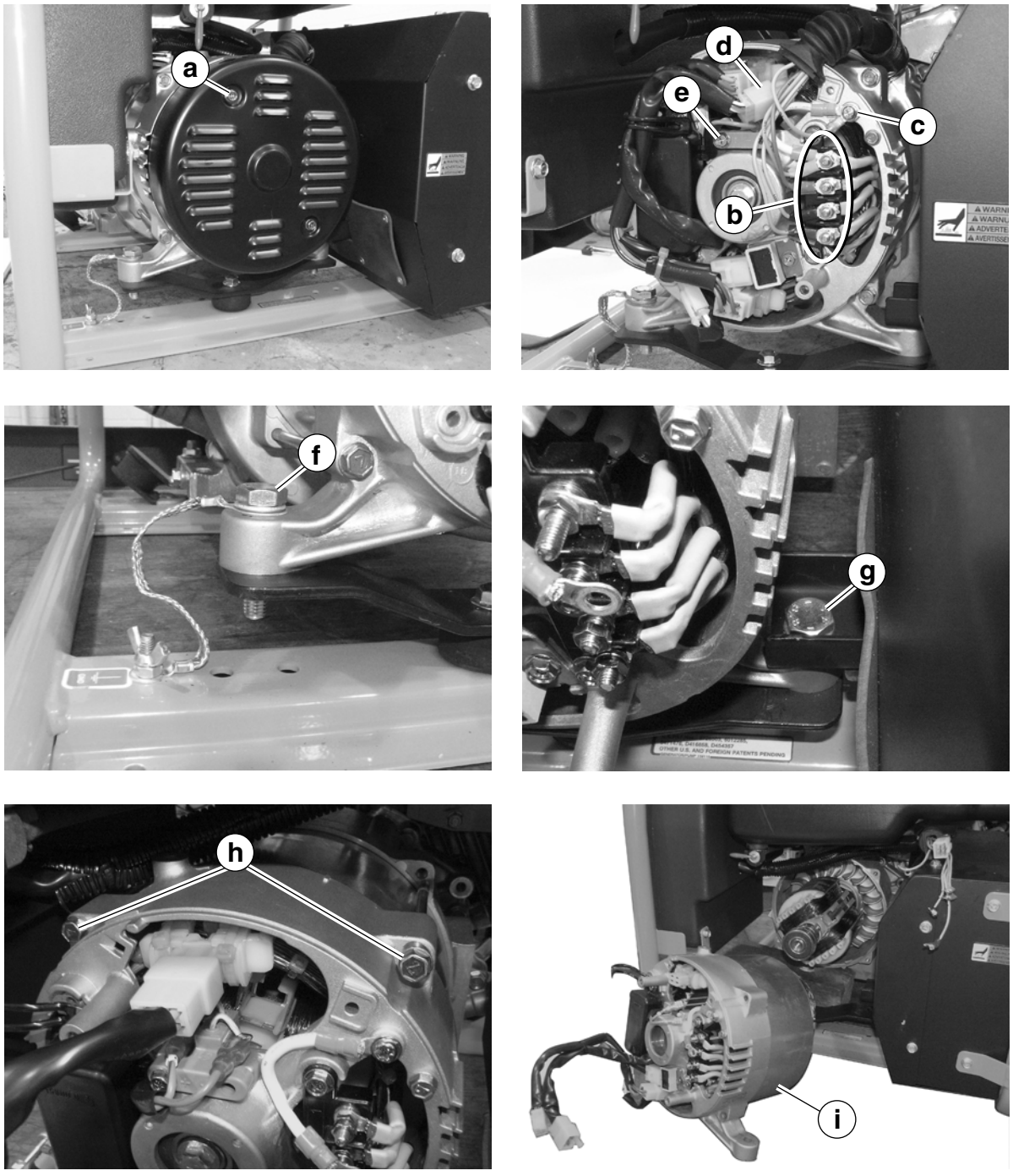
5.6.8 Install the ground strap, and generator mounting leg to the shock mount bracket with screw **(f)**. Also install the generator mounting leg and muffler to the shock mount bracket with screw **(g)**.

5.6.9 Install the brush holder with screw **(e)**.

5.6.10 Connect the wires **(b)** to the terminal strip, the ground wire **(c)**, and the harness connector **(d)**. On GP 2500A/GP 2600 models, connect the generator plug.

5.6.11 Install the end cover with screws **(a)**.

5.6.12 Reconnect the spark plug.



wc_gr003138

5.7 Replacing the Rotor

See Graphic: wc_gr003139

Removal

5.7.1 Disconnect the spark plug.

5.7.2 Remove the stator. See section *Replacing Stator.*

5.7.3 Prevent the engine's flywheel from turning by wedging a wrench **(a)** or like object into the fins of the fan. Then, remove the M8 screw **(b)** from the end of the rotor.

5.7.4 Place a few shop towels or similar padding underneath the rotor. These will catch the rotor if it should drop off the tapered shaft during removal. Also, support the housing with a piece of wood or similar material.

5.7.5 Insert into the hole in the shaft a headless M8 screw **(c)**; length: GP 2500/GP 2600 = 15 cm (6 in.); GP 3800 = 16 cm (6-1/4 in.); GP 5600 = 19 cm (7-1/2 in.); GP 6600 = 21 cm (8-1/4 in.). Then, use a pusher bolt **(d)** to loosen the rotor **(e)** from the engine shaft **(f)**. Carefully pull the rotor from the machine.

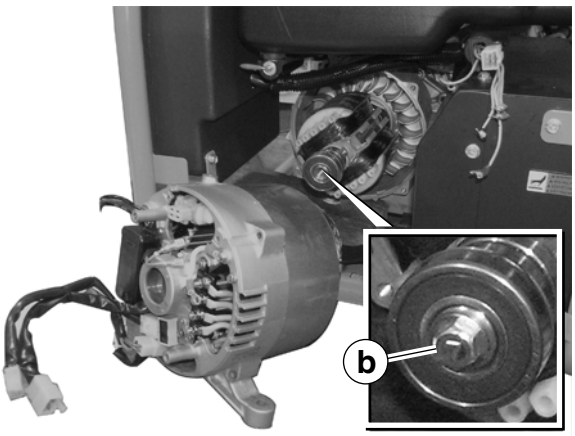
Installation:

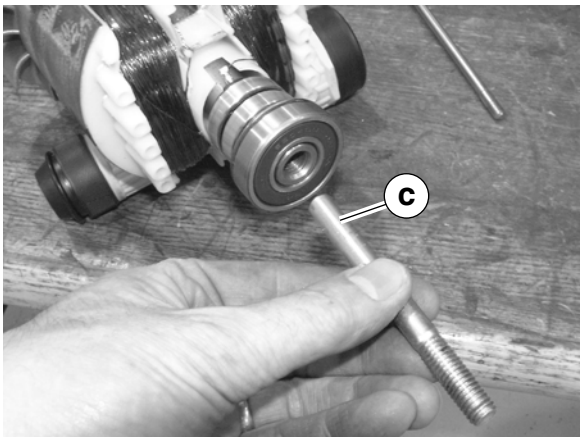
5.7.6 Position the rotor **(e)** onto the engine shaft **(f)**.

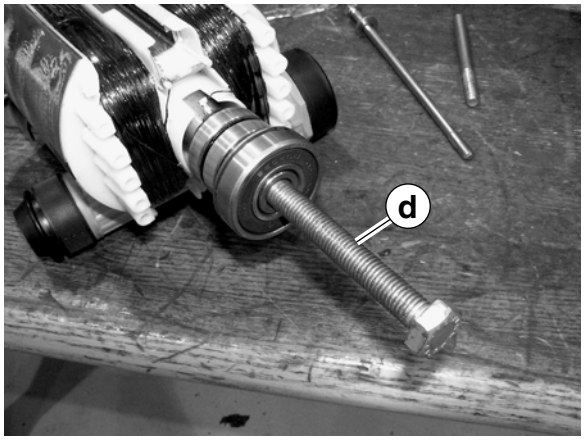
5.7.7 Wedge the engine fins to keep the flywheel from turning.

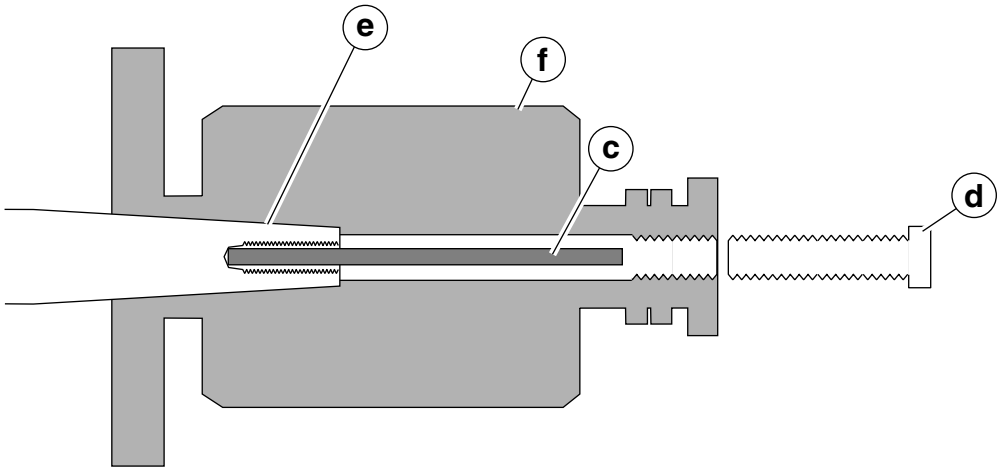
5.7.8 Secure the rotor to the engine shaft with the long M8 screw **(b)**.

5.7.9 Reconnect the spark plug.









wc_gr003139

5.8 Replacing the Engine

See Graphic: wc_gr003141

Removal:

5.8.1 Disconnect the spark plug.

5.8.2 Remove the generator. See section *Replacing the Rotor*.

5.8.3 Turn the fuel valve **(a)** off. Remove the fuel hose **(b)** at the fuel valve; plug the fuel hose as soon as it is free from the fuel valve.

5.8.4 Label and disconnect the wiring **(c)** running between the engine and the control panel.

5.8.5 Remove the three screws **(d)** that secure the muffler guard to the frame.

5.8.6 Remove the nuts **(e)** that secure the shockmounts to the frame (from underneath) and pull the engine and muffler assembly **(f)** (including shockmounts) from the frame.

Installation:

5.8.7 Position the engine and muffler assembly **(f)** into the frame. Secure it to the frame with screws **(e)**.

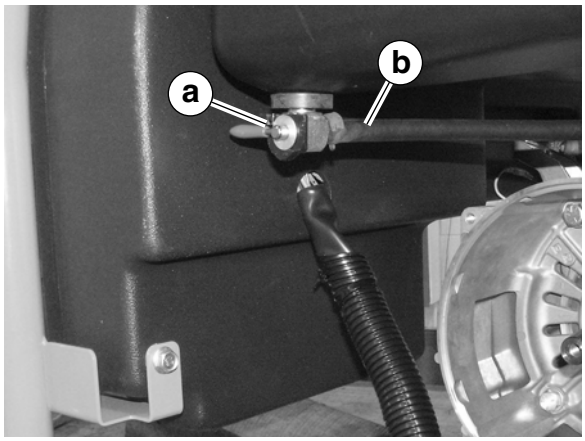
5.8.8 Secure the muffler guard to the frame with three screws **(d)**.

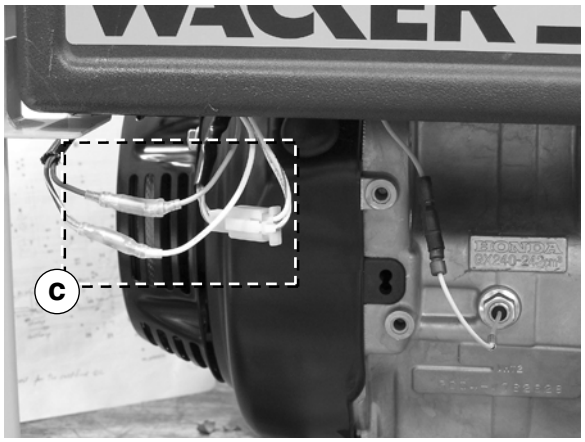
5.8.9 Reconnect the wiring **(c)** running between the engine and the control panel.

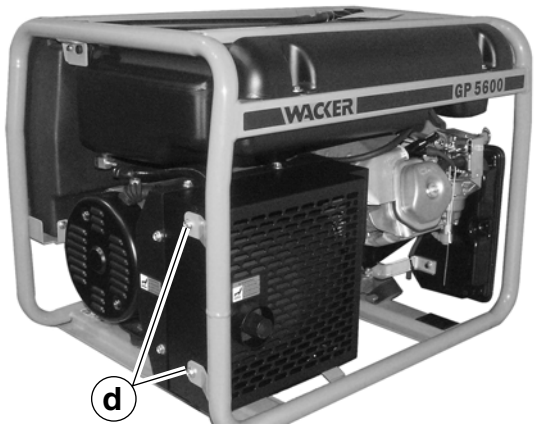
5.8.10 Reconnect the fuel hose **(b)**.

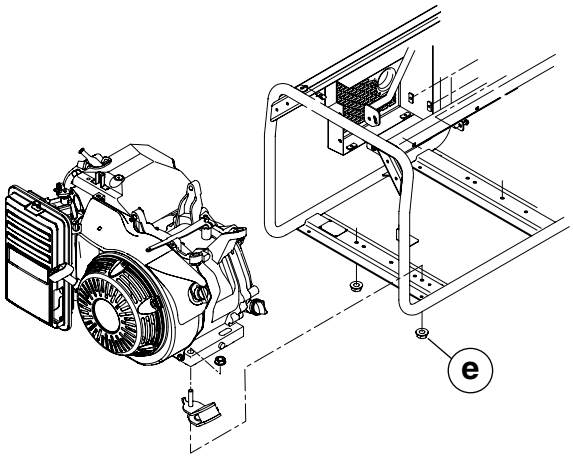
5.8.11 Install the rotor and stator. See section *Replacing the Rotor.*

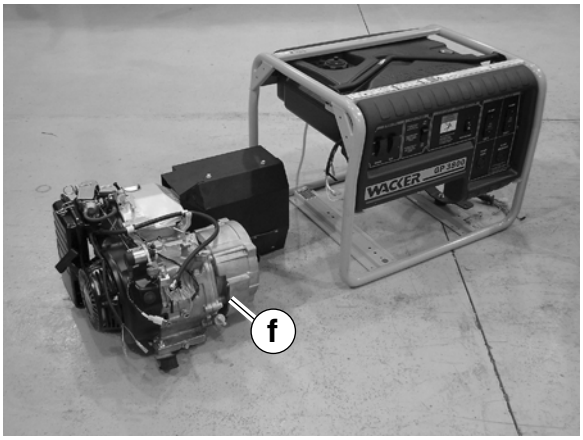
5.8.12 Reconnect the spark plug.











wc_gr003141

6 Technical Data

6.1 Generator—GP 2600

Item No.		**GP 2600** 0620116	**GP 2600** 0620088
Generator			
Maximum Output	W	2600	
Continuous Output	W	2250	
Type		Single voltage, single phase, auto voltage regulator system	
AC Voltages Available	Volts phase	120 1	
Frequency	Hz	60	
Power Factor		1.0	
AC receptacles: 125V GFI duplex 125V duplex	 Amp Amp	 20 20	
Main Circuit Breaker	Amp	20	
L x W x H	mm (in.)	615 x 435 x 545 (24.2 x 17 x 21.5)	
Weight (dry)	kg (lbs.)	47.7 (105)	

6.2 Engine—GP 2600

Item No.		**GP 2600** 0620116	**GP 2600** 0620088
Engine			
Engine Type		4-stroke, overhead valve, single cylinder	
Engine Make		Wacker	
Engine Model		WM 170	
Rated Power	kW (Hp)	4.2 (5.7)	
Spark Plug		NGK BR6HS (Champion RL86C)	
Electrode Gap	mm (in.)	0.6–0.7 (0.024–0.028)	
Operating Speed (Max.)	rpm	3600	
Air Cleaner	type	Dual Element	
Engine Lubrication	oil grade	SAE 10W30, SE or higher	
Engine Oil Capacity	l (qts.)	0.6 (20)	
Fuel	type	Regular unleaded gasoline	
Fuel Tank Capacity	l (gal.)	15 (4)	
Fuel Consumption	l (qts.)/hr.	1.47 (1.55)	
Running Time - continuous load	hrs.	10.2	

6.3 Generator—GP 3800

Item No.		**GP 3800A** 0620103	**GP 3800A CAN** 0620104
Generator			
Maximum Output	W	3800	
Continuous Output	W	3400	
Type		Dual voltage, single phase, Auto voltage regulator system	
AC Voltages Available	volts phase	120 / 240 1ø	
Frequency	Hz	60	
Power Factor		1.0	
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 20	
Main Circuit Breaker	amp	2-pole, 16 amp each pole	
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	
Weight (dry)	Kg (lbs.)	73 (160)	

Item No.		**GP 3800A** 0620342	**GP 3800A** 0620484
Generator			
Maximum Output	W	3800	
Continuous Output	W	3400	
Type		Dual voltage, single phase, Auto voltage regulator system	
AC Voltages Available	volts phase	120 / 240 1ø	
Frequency	Hz	60	
Power Factor		1.0	
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 20	
Main Circuit Breaker	amp	2-pole, 16 amp each pole	
L x W x H	mm (in.)	685 x 530 x 537 (27 x 21 x 21.2)	1003 x 686 x 677 (39.5 x 27 x 26.7)
Weight (dry)	Kg (lbs.)	76 (167.7)	85.7 (189)

6.4 Engine—GP 3800

Item No.		GP 3800A 0620103	GP 3800A CAN 0620104
Engine			
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine	
Engine Make		Honda	
Engine Model		GX 240	
Max. Rated Power @ Rated Speed	kW (Hp)	5.3 (7.1) @ 3600 rpm	
Spark Plug		BPR6ES / W20EPR-U	
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)	
Operating Speed	rpm	3600	
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner	
Auto Idle VAC	high idle low idle	119 90	
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC	
Engine Oil Capacity	l (qts.)	1.1 (1.2)	
Fuel	type	Regular unleaded gasoline	
Fuel Tank Capacity	l (gal.)	19.5 (5.2)	
Fuel Consumption	l (qts.)/hr.	2.4 (2.5)	
Running Time	hrs.	8.2	

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		**GP 3800A** 0620342 0620484
Engine		
Engine type		Single cylinder, 4-cycle, air-cooled, gasoline engine
Engine make		Honda
Engine model		GX 240 K1
Max. rated power @ rated speed	kW (Hp)	5.3 (7.1) @ 3600 rpm
Spark plug		BPR6ES / W20EPR-U
Electrode gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)
Operating speed	rpm	3600
Air cleaner	type	Dry type with oil-wetted foam pre-cleaner
Auto idle VAC	high idle low idle	119 90
Engine lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC
Engine oil capacity	l (qts.)	1.1 (1.2)
Fuel	type	Regular unleaded gasoline
Fuel tank capacity	l (gal.)	18.7 (4.94))
Fuel consumption	l (qts.)/hr.	2.4 (2.5)
Running time	hrs.	7.8

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		**GP 3800A** 0620485 0620379 0620104
Engine		
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine
Engine Make		Honda
Engine Model		GX 240
Max. Rated Power @ Rated Speed	kW (Hp)	5.3 (7.1) @ 3600 rpm
Spark Plug		BPR6ES / W20EPR-U
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)
Operating Speed	rpm	3600
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner
Auto Idle VAC	high idle low idle	119 90
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC
Engine Oil Capacity	l (qts.)	1.1 (1.2)
Fuel	type	Regular unleaded gasoline
Fuel Tank Capacity	l (gal.)	19.5 (5.2)
Fuel Consumption	l (qts.)/hr.	2.4 (2.5)
Running Time	hrs.	8.2

6.5 Generator—GP 4000

Item No.		**GP 4000** 0620089 0620325
Generator		
Maximum Output	W	4000
Continuous Output	W	3600
Type		Dual voltage, single phase, Auto voltage regulator system
AC Voltages Available	volts phase	120 / 240 1ø
Frequency	Hz	60
Power Factor		1.0
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 20
Main Circuit Breaker	amp	2-pole, 17 amp each pole
L x W x H	mm (in.)	685 x 530 x 535 (27 x 21 x 21)
Weight (dry)	Kg (lbs.)	69 (152)

Item No.		**GP 4000** 0620380 0620090
Generator		
Maximum Output	W	4000
Continuous Output	W	3600
Type		Dual voltage, single phase, Auto voltage regulator system
AC Voltages Available	volts phase	120 / 240 1ø
Frequency	Hz	60
Power Factor		1.0
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 20
Main Circuit Breaker	amp	2-pole, 17 amp each pole
L x W x H	mm (in.)	685 x 530 x 535 (27 x 21 x 21.2)
Weight (dry)	Kg (lbs.)	69 (152)

6.6 Engine—GP 4000

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		GP 4000 0620089 0320325
Engine		
Engine Type		4-stroke, overhead valve, single cylinder
Engine Make		Wacker Neuson
Engine Model		WM 270
Max. Rated Power @ Rated Speed	kW (Hp)	6.6 (9) @ 4000 rpm
Spark Plug		(NGK) BR 6HS Champion RL86C
Electrode Gap	mm (in.)	0.6–0.7 (0.024–0.028)
Operating Speed	rpm	3600
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner
Auto Idle VAC	high idle low idle	119 90
Engine Lubrication	oil grade	SAE 10W30, SE or higher
Engine Oil Capacity	l (oz.)	1.1 (37)
Fuel	type	Regular unleaded gasoline
Fuel Tank Capacity	l (gal.)	19.5 (5.2)
Fuel Consumption	l (gal.)/hr.	2.4 (0.63)
Running Time	hrs.	8.3

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		**GP 4000** 0620380 0620090
Engine		
Engine Type		4-stroke, overhead valve, single cylinder
Engine Make		Wacker Neuson
Engine Model		WM 270
Max. Rated Power @ Rated Speed	kW (Hp)	6.6 (9) @ 4000 rpm
Spark Plug		(NGK) BR 6HS Champion RL86C
Electrode Gap	mm (in.)	0.6–0.7 (0.024–0.028)
Operating Speed	rpm	3600
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner
Auto Idle VAC	high idle low idle	119 90
Engine Lubrication	oil grade	SAE 10W30, SE or higher
Engine Oil Capacity	l (oz.)	1.1 (37)
Fuel	type	Regular unleaded gasoline
Fuel Tank Capacity	l (gal.)	19.5 (5.2)
Fuel Consumption	l (gal.)/hr.	2.4 (0.63)
Running Time	hrs.	8.3

6.7 Generator—GP/GPS 5600

Item No.		**GP 5600A** 0620091	**GP 5600A** 0620092	**GPS 5600A** 0620093
Generator				
Maximum Output	W	5600		
Continuous Output	W	5000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 23 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26)	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	84 (186)	94 (208)	91 (201)

Item No.		GP 5600A CAN 0620094	GP 5600A CAN 0620095	GPS 5600A CAN 0620096
Generator				
Maximum Output	W	5600		
Continuous Output	W	5000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 23 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26)	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	84 (186)	94 (208)	91 (201)

Item No.		**GP 5600A** 0620327	**GP 5600A** 0620326	**GPS 5600A** 0620328
Generator				
Maximum Output	W	5600		
Continuous Output	W	5000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 23 amp each pole		
L x W x H	mm (in.)	685 x 530 x 537 (27 x 21 x 21.2)	1003 x 686 x 677 (39.5 x 27 x 26.7)	870 x 530 x 537 (34.3 x 21 x 21.2)
Weight (dry)	Kg (lbs.)	89 (194)	98 (216)	94.8 (209)

Item No.		GP 5600A 0620382	GP 5600A 0620381	GPS 5600A 0620383
Generator				
Maximum Output	W	5600		
Continuous Output	W	5000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles:				
125V duplex	amp	20		
125V duplex	amp	20		
125V twist-lock	amp	30		
125V/250V twist-lock	amp	30		
Main Circuit Breaker	amp	2-pole, 23 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26)	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	84 (186)	94 (208)	91 (201)

Item No.		**GP 5600A CAN** 0620094	**GP 5600A CAN** 0620095	**GPS 5600A CAN** 0620096
Generator				
Maximum Output	W	5600		
Continuous Output	W	5000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles:				
125V duplex	amp	20		
125V duplex	amp	20		
125V twist-lock	amp	30		
125V/250V twist-lock	amp	30		
Main Circuit Breaker	amp	2-pole, 23 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26)	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	84 (186)	94 (208)	91 (201)

6.8 Engine—GP/GPS 5600

Item No.		GP 5600A 0620091 0620092	GP 5600A CAN 0620094 0620095	GPS 5600A 0620093	GPS 5600A CAN 0620096
Engine					
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine			
Engine Make		Honda			
Engine Model		GX 340 K1			
Rated Power	kW (Hp)	8.2 (11)			
Spark Plug		BPR6ES / W20EPR-U			
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)			
Operating Speed (Max.)	rpm	3600			
Auto Idle VAC	high idle low idle	119 90			
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner			
Battery	type V/ capacity Size (in.)	N/A		Y50-N18L-A 12V - 20 Amp-hour $8\text{-}1/8 \times 3\text{-}9/16 \times 6\text{-}7/16$	
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC			
Engine Oil Capacity	l (qts.)	1.1 (1.2)			
Fuel	type	Regular unleaded gasoline			
Fuel Tank Capacity	l (gal.)	19.5 (5.2)			
Fuel Consumption	l (qts.)/ hr.	3.2 (3.4)			
Running Time	hrs.	6			

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		**GP 5600A** 0620327 0620326	**GPS 5600A** 0620328
Engine			
Engine type		Single cylinder, 4-cycle, air-cooled, gasoline engine	
Engine make		Honda	
Engine model		GX 340 K1	
Max. rated power @ rated speed	kW (Hp)	7.1 (9.5) @ 3600 rpm	
Spark plug		BPR6ES / W20EPR-U	
Electrode gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)	
Operating speed	rpm	3600	
Auto idle VAC	high idle low idle	119 90	
Air cleaner	type	Dry type with oil-wetted foam pre-cleaner	
Battery	type V/ capacity Size (in.)	N/A	Y50-N18L-A 12V - 20 Amp-hour $8\text{-}^{1}/_{8} \times 3\text{-}^{9}/_{16} \times 6\text{-}^{7}/_{16}$
Engine lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC	
Engine oil capacity	l (qts.)	1.1 (1.2)	
Fuel	type	Regular unleaded gasoline	
Fuel tank capacity	l (gal.)	18.7 (4.94)	
Fuel consumption	l (qts.)/ hr.	3.2 (3.4)	
Running time	hrs.	8.78	

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		GP 5600A 0620381 0620382	GP 5600A CAN 0620094 0620095	GPS 5600A 0620383	GPS 5600A CAN 0620096
Engine					
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine			
Engine Make		Honda			
Engine Model		GX 340 K1			
Max. Rated Power @ Rated Speed	kW (Hp)	7.1 (9.5) @ 3600 rpm			
Spark Plug		BPR6ES / W20EPR-U			
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)			
Operating Speed	rpm	3600			
Auto Idle VAC	high idle low idle	119 90			
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner			
Battery	type V/ capacity Size (in.)	N/A		Y50-N18L-A 12V - 20 Amp-hour $8\text{-}^{1}/_{8} \times 3\text{-}^{9}/_{16} \times 6\text{-}^{7}/_{16}$	
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC			
Engine Oil Capacity	l (qts.)	1.1 (1.2)			
Fuel	type	Regular unleaded gasoline			
Fuel Tank Capacity	l (gal.)	19.5 (5.2)			
Fuel Consumption	l (qts.)/ hr.	3.2 (3.4)			
Running Time	hrs.	6			

6.9 Generator—GP/GPS 6600

Item No.		**GP 6600A** 0620097	**GP 6600A** 0620098	**GPS 6600A** 0620099
Generator				
Maximum Output	W	6600		
Continuous Output	W	6000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 27 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	87 (192)	96.6 (213)	94 (206.5)

Item No.		GP 6600A CAN 0620100	GP 6600A CAN 0620101	GPS 6600A CAN 0620102
Generator				
Maximum Output	W	6600		
Continuous Output	W	5500		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 27 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	87 (192)	96.6 (213)	94 (206.5)

Item No.		GP 6600A 0620330	GP 6600A 0620329	GPS 6600A 0620331
Generator				
Maximum Output	W	6600		
Continuous Output	W	6000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 27 amp each pole		
L x W x H	mm (in.)	685 x 530 x 537 (27 x 21 x 21.2)	1003 x 686 x 677 (39.5 x 27 x 26.7)	870 x 530 x 537 (34.3 x 21 x 21.2)
Weight (dry)	Kg (lbs.)	89.8 (198)	99.8 (220)	96.6 (213)

Item No.		**GP 6600A** 0620385	**GP 6600A** 0620384	**GPS 6600A** 0620386
Generator				
Maximum Output	W	6600		
Continuous Output	W	6000		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 27 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	87 (192)	96.6 (213)	94 (206.5)

Item No.		GP 6600A CAN 0620100	GP 6600A CAN 0620101	GPS 6600A CAN 0620102
Generator				
Maximum Output	W	6600		
Continuous Output	W	5500		
Type		Dual voltage, single phase, Auto voltage regulator system		
AC Voltages Available	volts phase	120 / 240 1ø		
Frequency	Hz	60		
Power Factor		1.0		
AC receptacles: 125V duplex 125V duplex 125V twist-lock 125V/250V twist-lock	 amp amp amp amp	 20 20 30 30		
Main Circuit Breaker	amp	2-pole, 27 amp each pole		
L x W x H	mm (in.)	685 x 530 x 520 (27 x 21 x 20.5)	1005 x 685 x 660 (39.5 x 27 x 26	870 x 530 x 520 (34.3 x 21 x 20.5)
Weight (dry)	Kg (lbs.)	87 (192)	96.6 (213)	94 (206.5)

6.10 Engine—GP/GPS 6600

Item No.		GP 6600A 0620097 0620098	GP 6600A CAN 0620100 0620101	GPS 6600A 0620099	GPS 6600A CAN 0620102
Engine					
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine			
Engine Make		Honda			
Engine Model		GX 390			
Rated Power	kW (Hp)	9.7 (13)			
Spark Plug		Champion RN10Y			
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)			
Operating Speed (Max.)	rpm	3600			
Auto Idle VAC	high idle low idle	119 90			
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner			
Battery	type rating size (in.)	N/A		Y50-N18L-A 12V - 20 Amp-hour $8\text{-}^{1}/_{8} \times 3\text{-}^{9}/_{16} \times 6\text{-}^{7}/_{16}$	
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC			
Engine Oil Capacity	l (qts.)	1.1 (1.2)			
Fuel	type	Regular unleaded gasoline			
Fuel Tank Capacity	l (gal.)	19.5 (5.2)			
Fuel Consumption	l (qts.)/hr.	3.9 (4.1)			
Running Time	hrs.	5			

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		**GP 6600A** 0620330 0620329	**GPS 6600A** 0620331
Engine			
Engine type		Single cylinder, 4-cycle, air-cooled, gasoline engine	
Engine make		Honda	
Engine model		GX 390 K1	
Maximum rated power @ rated speed	kW (Hp)	8.2 (11) @ 3600 rpm	
Spark plug		Champion RN10Y	
Electrode gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)	
Operating speed	rpm	3600	
Autoidle VAC	high idle low idle	119 90	
Air cleaner	type	Dry type with oil-wetted foam pre-cleaner	
Battery	type rating size (in.)	N/A	Y50-N18L-A 12V - 20 Amp-hour $8\text{-}^{1}/_{8} \times 3\text{-}^{9}/_{16} \times 6\text{-}^{7}/_{16}$
Engine lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC	
Engine oil capacity	l (qts.)	1.1 (1.2)	
Fuel	type	Regular unleaded gasoline	
Fuel tank capacity	l (gal.)	18.7 (4.94)	
Fuel consumption	l (qts.)/hr.	3.9 (4.1)	
Running time	hrs.	4.8	

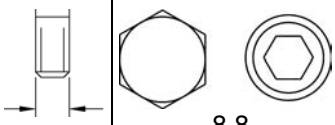
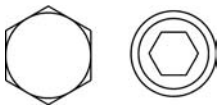
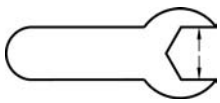
Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

Item No.		GP 6600A 0620385 0620384	GP 6600A CAN 0620100 0620101	GPS 6600A 0620386	GPS 6600A CAN 0620102
Engine					
Engine Type		Single cylinder, 4-cycle, air-cooled, gasoline engine			
Engine Make		Honda			
Engine Model		GX 390			
Max. Rated Power @ Rated Speed	kW (Hp)	8.2 (11) @ 3600 rpm			
Spark Plug		Champion RN10Y			
Electrode Gap	mm (in.)	0.7 - 0.8 (0.028 - 0.031)			
Operating Speed	rpm	3600			
Auto Idle VAC	high idle low idle	119 90			
Air Cleaner	type	Dry type with oil-wetted foam pre-cleaner			
Battery	type rating size (in.)	N/A		Y50-N18L-A 12V - 20 Amp-hour $8\text{-}^{1}/_{8}$ x $3\text{-}^{9}/_{16}$ x $6\text{-}^{7}/_{16}$	
Engine Lubrication	oil grade	SAE 10W30 service class SF, SE, SD or SC			
Engine Oil Capacity	l (qts.)	1.1 (1.2)			
Fuel	type	Regular unleaded gasoline			
Fuel Tank Capacity	l (gal.)	19.5 (5.2)			
Fuel Consumption	l (qts.)/hr.	3.9 (4.1)			
Running Time	hrs.	5			

Torque Values

Metric Fasteners (DIN)

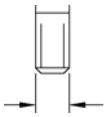
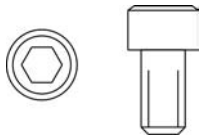
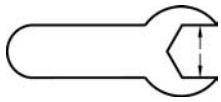
	TORQUE VALUES (Based on Bolt Size and Hardness)						**WRENCH SIZE**			
	 8.8		 10.9		12.9					
Size	**Nm**	**ft.lb.**	**Nm**	**ft.lb.**	**Nm**	**ft.lb.**	**Metric**	**Inch**	**Metric**	**Inch**
M3	1.2	*11	1.6	*14	2.1	*19	5.5	7/32	2.5	–
M4	2.9	*26	4.1	*36	4.9	*43	7	9/32	3	–
M5	6.0	*53	8.5	6	10	7	8	5/16	4	–
M6	10	7	14	10	17	13	10	–	5	–
M8	25	18	35	26	41	30	13	1/2	6	–
M10	49	36	69	51	83	61	17	11/16	8	–
M12	86	63	120	88	145	107	19	3/4	10	–
M14	135	99	190	140	230	169	22	7/8	12	–
M16	210	155	295	217	355	262	24	15/16	14	–
M18	290	214	405	298	485	357	27	1-1/16	14	–
M20	410	302	580	427	690	508	30	1-1/4	17	–

1 ft.lb. = 1.357 Nm * = in.lb. 1 inch = 25.4 mm

Torque Values

Torque Values (continued)

Inch Fasteners (SAE)

										
Size	**Nm**	**ft.lb.**	**Nm**	**ft.lb.**	**Nm**	**ft.lb.**	**Metric**	**Inch**	**Metric**	**Inch**
No.4	0.7	*6	1.0	*14	1.4	*12	5.5	1/4	–	3/32
No.6	1.4	*12	1.9	*17	2.4	*21	8	5/16	–	7/64
No.8	2.5	*22	3.5	*31	4.7	*42	9	11/32	–	9/64
No.10	3.6	*32	5.1	*45	6.8	*60	–	3/8	–	5/32
1/4	8.1	6	12	9	16	12	–	7/16	–	3/32
5/16	18	13	26	19	33	24	13	1/2	–	1/4
3/8	31	23	45	33	58	43	–	9/16	–	5/16
7/16	50	37	71	52	94	69	16	5/8	–	3/8
1/2	77	57	109	80	142	105	19	3/4	–	3/8
9/16	111	82	156	115	214	158	–	13/16	–	–
5/8	152	112	216	159	265	195	24	15/16	–	1/2
3/4	271	200	383	282	479	353	–	1-1/8	–	5/8

1 ft.lb. = 1.357 Nm * = in.lb. 1 inch = 25.4 mm

Threadlockers and Sealants

Threadlocking adhesives and sealants are specified throughout this manual by a notation of “S” plus a number (S#) and should be used where indicated. Threadlocking compounds normally break down at temperatures above 175°C (350°F). If a screw or bolt is hard to remove, heat it using a small propane torch to break down the sealant. When applying sealants, follow instructions on container. The sealants listed are recommended for use on Wacker Neuson equipment.

TYPE ( ) = Europe	COLOR	USAGE	PART NO. – SIZE
Loctite 222 Hernon 420 Omnifit 1150 (50M)	Purple	Low strength, for locking threads smaller than 6 mm (1/4”). Hand tool removable. Temp. range: -54 to 149°C (-65 to 300°F)	73287 - 10 ml
Loctite 243 Hernon 423 Omnifit 1350 (100M)	Blue	Medium strength, for locking threads larger than 6 mm (1/4”). Hand tool removable. Temp. range: -54 to 149°C (-65 to 300°F)	29311 - .5 ml 17380 - 50 ml
Loctite 271/277 Hernon 427 Omnifit 1550 (220M)	Red	High strength, for all threads up to 25 mm (1”). Heat parts before disassembly. Temp. range: -54 to 149°C (-65 to 300°F)	29312 - .5 ml 26685 - 10 ml 73285 - 50 ml
Loctite 290 Hernon 431 Omnifit 1710 (230LL)	Green	Medium to high strength, for locking preassembled threads and for sealing weld porosity (wicking). Gaps up to 0.13 mm (0.005”) Temp. range: -54 to 149°C (-65 to 300°F)	28824 - .5 ml 25316 - 10 ml
Loctite 609 Hernon 822 Omnifit 1730 (230L)	Green	Medium strength retaining compound for slip or press fit of shafts, bearings, gears, pulleys, etc. Gaps up to 0.13 mm (0.005”) Temp. range: -54 to 149°C (-65 to 300°F)	29314 - .5 ml
Loctite 545 Hernon 947 Omnifit 1150 (50M)	Brown	Hydraulic sealant Temp. range: -54 to 149°C (-65 to 300°F)	79356 - 50 ml
Loctite 592 Hernon 920 Omnifit 790	White	Pipe sealant with Teflon for moderate pressures. Temp. range: -54 to 149°C (-65 to 300°F)	26695 - 6 ml 73289 - 50 ml
Loctite 515 Hernon 910 Omnifit 10	Purple	Form-in-place gasket for flexible joints. Fills gaps up to 1.3 mm (0.05”) Temp. range: -54 to 149°C (-65 to 300°F)	70735 - 50 ml

Threadlockers and Sealants (continued)

Threadlocking adhesives and sealants are specified throughout this manual by a notation of “S” plus a number (S#) and should be used where indicated. Threadlocking compounds normally break down at temperatures above 175°C (350°F). If a screw or bolt is hard to remove, heat it using a small propane torch to break down the sealant. When applying sealants, follow instructions on container. The sealants listed are recommended for use on Wacker Neuson equipment.

TYPE ( ) = Europe	COLOR	USAGE	PART NO. – SIZE
Loctite 496 Hernon 110 Omnifit Sicomet 7000	Clear	Instant adhesive for bonding rubber, metal and plastics; general purpose. For gaps up to 0.15 mm (0.006”) Read caution instructions before using. Temp. range: -54 to 82°C (-65 to 180°F)	52676 - 1oz.
Loctite Primer T Hernon Primer 10 Omnifit VC Activator	Aerosol Spray	Fast curing primer for threadlocking, retaining and sealing compounds. Must be used with stainless steel hardware. Recommended for use with gasket sealants.	2006124-6 oz.

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